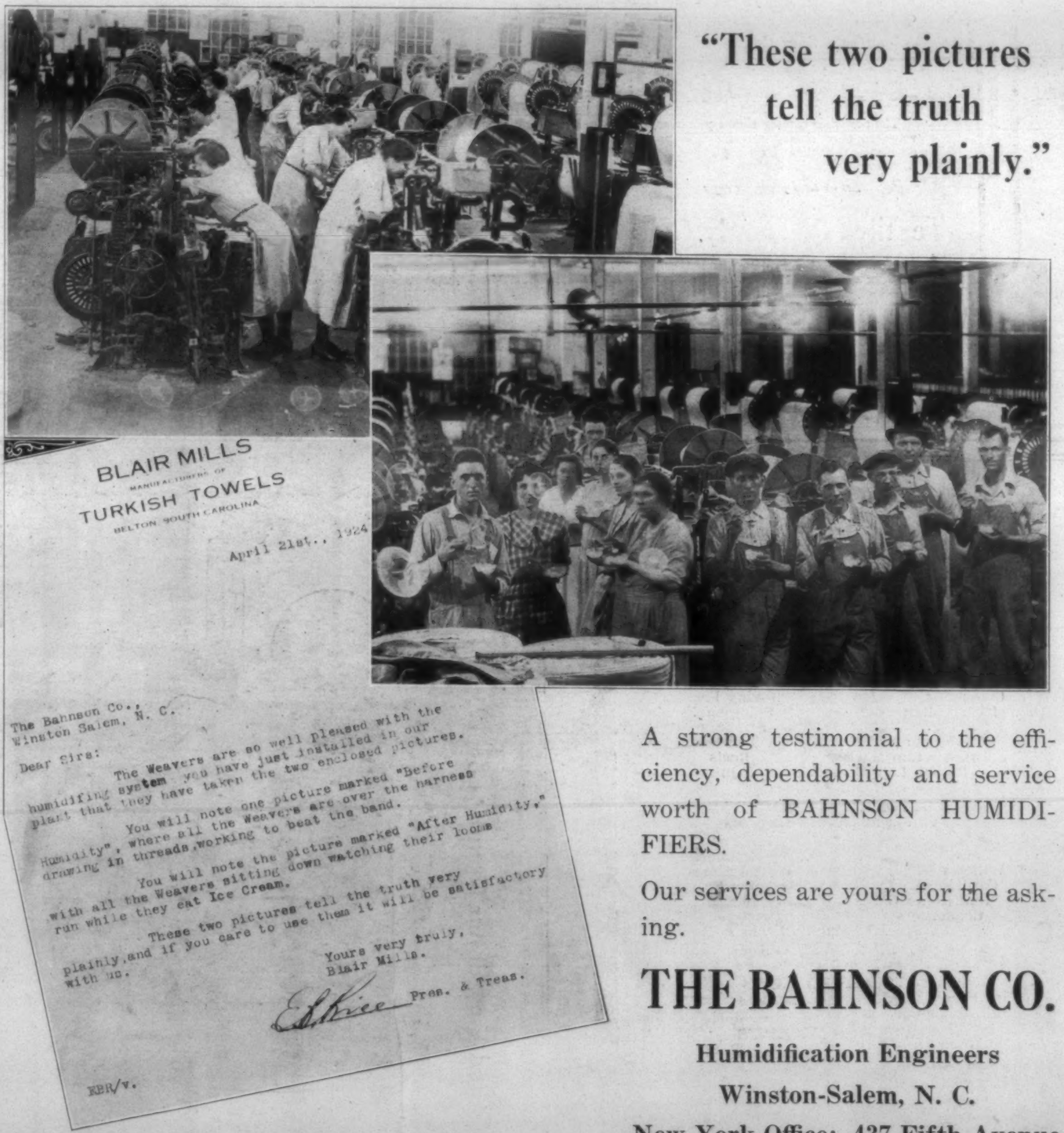
Commerce

Better Equipment for Southern Mills

SOUTHERN TEXTILE BULLETIN

VOLUME 26 CHARLOTTE, N. C., THURSDAY JUNE 5, 1924 NUMBER 14



BLAIR MILLS
MANUFACTURERS OF
TURKISH TOWELS
BELTON, SOUTH CAROLINA

April 21st., 1924

The Bahnson Co.,
Winston Salem, N. C.

Dear Sirs:

The Weavers are so well pleased with the humidifing system you have just installed in our plant that they have taken the two enclosed pictures.

You will note one picture marked "Before Humidity", where all the Weavers are over the harness drawing in threads, working to beat the band.

You will note the picture marked "After Humidity," with all the Weavers sitting down watching their looms run while they eat Ice Cream.

These two pictures tell the truth very plainly, and if you care to use them it will be satisfactory with us.

Yours very truly,
Blair Mills.

E. L. Rice Pres. & Treas.

EBR/v.

"These two pictures tell the truth very plainly."

A strong testimonial to the efficiency, dependability and service worth of BAHNSON HUMIDIFIERS.

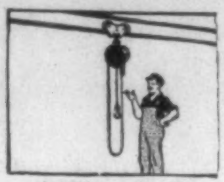
Our services are yours for the asking.

THE BAHNSON CO.

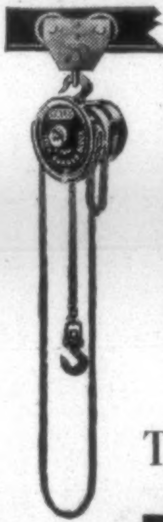
Humidification Engineers
Winston-Salem, N. C.
New York Office: 437 Fifth Avenue

Five Men and a Hand-Truck

equal



One Man and a Yale Spur-Geared Chain Block on a I beam trolley.



AND the one man with the Yale equipment will perform the same work in the Safest Way, take up less working space, and do it quicker.

The Yale Spur-Geared Block is the *safest*, speediest, portable hand hoist.

"From Hook-to-Hook-a-Line-of-Steel"

The new Yale catalog shows you many ways to save money and increase production in your plant by using Yale Chain Blocks and Electric Hoists.

Let us send you your copy

Textile Mill Supply Co.

YALE

Textile Mill Supply Co.

INCORPORATED 1898

CHARLOTTE, N. C.

AGENTS FOR

Graton & Knight
Leather Belting

U. S. Bobbin & Shuttle Co.
Bobbins & Shuttles

DODGE
Hangers, Pulleys, Couplings

Card Clothing **Reeds**

WYANDOTTE
Concentrated Ash Textile Soda K. B. Special Ash Detergent

We Carry a Complete Stock and Can Make Immediate Shipmen

Everything In Mill and Factory Supplies

WHITIN MACHINE WORKS

ESTABLISHED 1831

TEXTILE MACHINERY

Manufacturers of the following Machines

COTTON MACHINES

Cleaning
Opening
Conveying
Distributing
Picking
Revolving Flat Cards
Sliver Lap Machines
Ribbon Lap Machines
Combing Machines
Drawing Frames
Roving Frames
Spinning Frames
Spoolers
Twisters
Reels
Quillers
Loom Dobbies

COTTON WASTE MACHINES
Cotton and Woolen Systems

Openers
Pickers
Willows
Card Feeds
Full Roller Cards
Condensers
Revolving Flat Cards
Derby Doublers
Roving Frames
Spinning Frames
Spoolers
Twisters
Special Spinning Frames

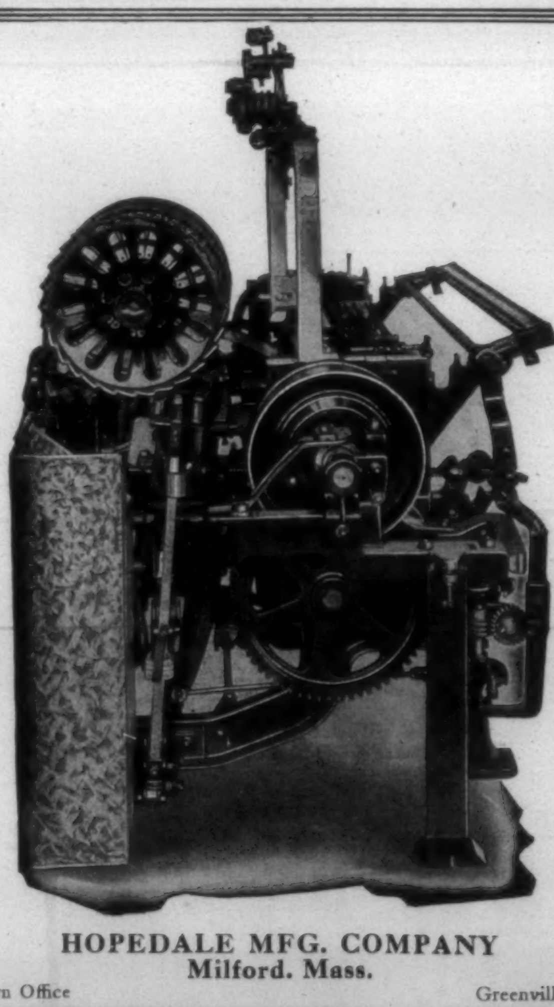
SILK MACHINES
Ring Twisters

WOOLEN MACHINES
Card Feeds
Full Roller Cards
Condensers
Wool Spinning Frames

WORSTED MACHINES
Cone Roving Frames
Ring Twisters

MAIN OFFICE AND WORKS
WHITINSVILLE, MASS. U.S.A.
SOUTHERN OFFICE CHARLOTTE, N.C.

End-View of our Nordray Loom With Lacey Top-Rig



We Build a Simple Automatic With Rugged Design

HOPEDALE MFG. COMPANY
Milford, Mass.

Southern Office Greenville S. C.

MATHIESON Chemicals

A Southern Institution

Saltville is located on the Norfolk & Western Railway, 37 miles from the line of the Southern Railway at Bristol, Va.-Tenn.

For all points in the South, freight differentials are overwhelmingly in our favor over any other plant manufacturing soda products.

TWO great factors in the rapid growth of the Textile Industry in the South have been favorable labor conditions and nearby sources of raw materials.

The only plant in the South manufacturing Soda products, our works at Saltville, Va., is the logical source of supply for Southern Textile Mills and may truly be called a Southern institution. During the twenty-nine years of its existence, this plant has saved Southern consumers millions of dollars in freight charges.

Let us serve you direct from the works in either carload or less-than-carload quantities.

The MATHIESON ALKALI WORKS Inc.
25 WEST 43rd STREET NEW YORK CITY

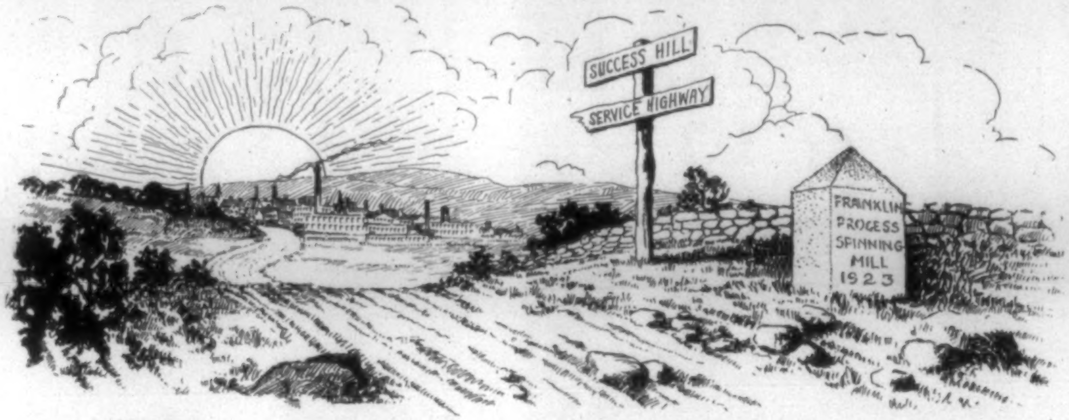
PHILADELPHIA
PROVIDENCE

CHICAGO
CHARLOTTE

EAGLE THISTLE PRODUCTS

Deal Direct with the Manufacturer

Bicarbonate of Soda
Liquid Chlorine~Caustic Soda
Sesquicarbonate of Soda
Bleaching Powder~Soda Ash



Still another Milestone

IN FEBRUARY 1921 we announced the completion of a new commission dye house in Providence, R. I. In February 1922 we announced the completion of "another milestone" of progress,— a new commission dyehouse at Greenville, S. C. Both of these dyehouses are thoroughly modern in every way, completely equipped with Franklin Package Dyeing Machines for dyeing yarn in the wound form, and, with our Philadelphia plant, also a model dyehouse, make a total of three in this country. In addition to these we also have a plant in Denton, England, near Manchester.

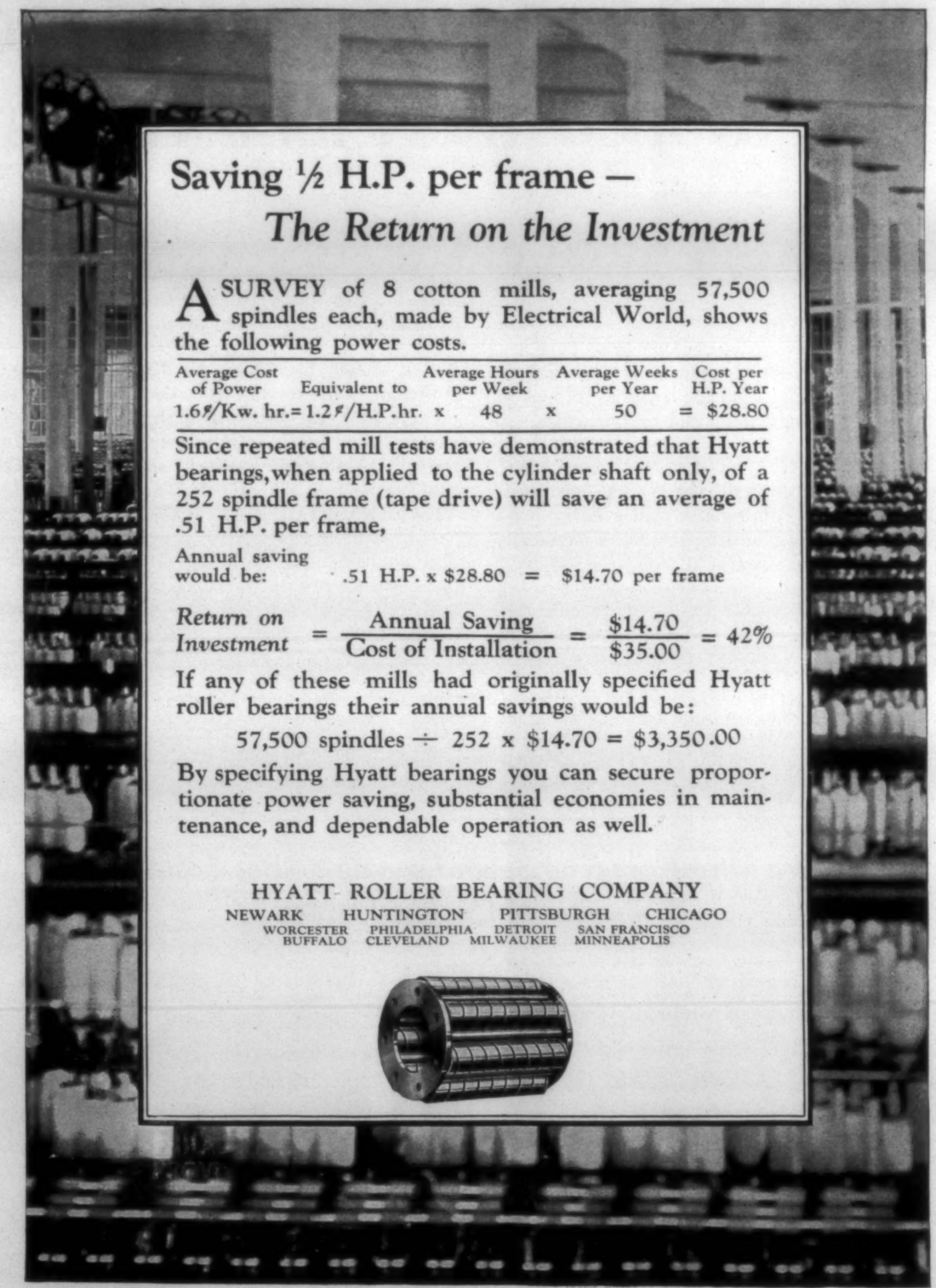
Now we take pleasure in announcing still another milestone,— the Franklin Process Spinning Mill at Fingerville, S. C. The addition of this mill to our organization increases the range of our service and by eliminating unnecessary processes will result in material advantages to our customers.

The Franklin Process Spinning Mill will manufacture cotton yarns, both single and ply up to 30's exclusively for distribution through the Franklin Process Company. Our three commission dyehouses will hereafter carry large stocks of grey yarn in these counts to apply only on customers' dyeing orders, if they so desire.

Thus, from now on, when customers specify that we furnish the yarn in counts up to 30's they can be assured of delivery in a week or ten days or in less time if the occasion demands.

Customers who still wish to furnish their own yarn for dyeing will receive the same courteous and prompt attention as in the past.

FRANKLIN PROCESS COMPANY
Yarn Dyers · Yarn Spinners · M'f'rs Glazed Yarns · Dyeing Machines
Philadelphia · PROVIDENCE · Manchester, Eng.
New York Office 72 Leonard St.
SOUTHERN FRANKLIN PROCESS COMPANY
Greenville, S. C.



Saving ½ H.P. per frame —
The Return on the Investment

A SURVEY of 8 cotton mills, averaging 57,500 spindles each, made by Electrical World, shows the following power costs.

Average Cost of Power	Equivalent to		Average Hours per Week		Average Weeks per Year		Cost per H.P. Year
1.6¢/Kw. hr. =	1.2¢/H.P.hr.	x	48	x	50	=	$28.80

Since repeated mill tests have demonstrated that Hyatt bearings, when applied to the cylinder shaft only, of a 252 spindle frame (tape drive) will save an average of .51 H.P. per frame,

Annual saving would be: .51 H.P. x $28.80 = $14.70 per frame

$$\textit{Return on Investment} = \frac{\text{Annual Saving}}{\text{Cost of Installation}} = \frac{\$14.70}{\$35.00} = 42\%$$

If any of these mills had originally specified Hyatt roller bearings their annual savings would be:

57,500 spindles ÷ 252 x $14.70 = $3,350.00

By specifying Hyatt bearings you can secure proportionate power saving, substantial economies in maintenance, and dependable operation as well.

HYATT ROLLER BEARING COMPANY
NEWARK HUNTINGTON PITTSBURGH CHICAGO
WORCESTER PHILADELPHIA DETROIT SAN FRANCISCO
BUFFALO CLEVELAND MILWAUKEE MINNEAPOLIS

Mills That Pay Best Dividends Are Equipped for Light Carding

Economists are generally agreed that quality textiles are now produced in the South at an average lower cost than those of the North.

The reasons are obvious:—nearness to the source of raw materials; cheaper power; a co-operation on the part of operatives, and, above all, the South's eager attitude towards improvements in textile machinery and mill practice.

One practice, however, could be much more generally adopted throughout the South—one that would give our textile mills a still greater production-quality lead, and one which is strongly advocated by all engineers—LIGHT CARDING.

Crowding the cards—forcing them to carry a load of over 125 pounds per day—results in a sliver which still retains a much-too-great percentage of motes and in which the fibers have not been perfectly and uniformly combed out; and this can mean but one thing: impairment of quality in the finished product.

Extra cards, to bring the machines up to a sufficient number to take the laps from the pickers and run them through in light loads—giving every tooth an opportunity to do its full duty — producing perfect slivers, IS THE SOUNDEST AND MOST PROFITABLE INVESTMENT YOU CAN MAKE.

Extra cards mean lowering your record of seconds, with a prompt increase of net profits that will quickly absorb the cost of the additional cards.

NOW is the best of all times to install additional cards. Better carding will mean increased production on the spinning frames in the days not far ahead when high production will mean large profits.

We Must Keep The South Leading in Big Scale Production of Quality Textiles

If you are crowding your cards—piling up seconds — increasing inspection costs — lowering profits—**thinning dividends**—NOW is the time to revise your carding practice. Ask your manufacturer for quotations NOW.

Better Equipment Campaign

This advertisement contributed to by the following firms:

Saco-Lowell Shops
Whitin Machine Works
H. & B. American Machine Co.
Fales & Jenks Machine Co.
Woonsocket Machine & Press Co.
Whitinsville Spinning Ring Co.
Crompton & Knowles Loom Works
Lestershire Spool & Mfg. Co.
The Stafford Co.
Easton & Burnham Machine Co.
Ashworth Bros., Inc.
Terrell Machine Co.
U. S. Bobbin & Shuttle Co.
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Mossberg Pressed Steel Corp.
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Franklin Process Co.
T. C. Entwistle Co.
Link-Belt Co.

SOUTHERN
TEXTILE BULLETIN

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VOLUME 26 CHARLOTTE, N. C., THURSDAY JUNE 5, 1924 NUMBER 14

Advantages of Light Carding

By a Representative of the Whitin Machine Works.

WITH competition as keen as it is between textile manufacturing plants in this country, as well as this nation as a textile power, facing the attempts of foreign competitors to establish a market for their goods here in the United States, with cotton crops made smaller due to the boll weevil, there remains one salvation for the textile manufacturers today—one and all have to turn out a better grade of goods than ever before. That means economy of operation and quality—and there is no quality to be had when cards are loaded up and required to do twice as much as they should do.

Lighter carding should be the aim of every mill desiring first-class quality in their goods.

There is as little use to demand quality of a card when jamming it full of cotton as there is demanding good riding qualities of an automobile traveling 60 miles an hour over a poor road surface.

Much depends on the laps delivered from the picker-room. Too often one sees a card trying to clean, pick and card cotton—the result being a web full of nits, specks, and leaf, and a card with dirty, damaged fillets.

The Whitin revolving top flat card is a machine which can be positively set to do the finest kind of work, but all the excellent workmanship and design of our card can be made to count for little by any boss carder who thinks he can turn it into a bale-breaker.

The modern, up-to-date card, as typified by the Whitin revolving top flat card, has many refinements. Let us run over the salient points of interest in the Whitin card.

The Whitin card is a heavy, rigidly constructed machine, built to eliminate all possible vibration, with all the parts milled and fitted to assure the best of construction. The cylinders and doffers are ground to an absolutely true surface, and then balanced accurately to a speed much higher than actually required. The cylinder bearings are removable bronze bushings, with the pedestal so designed that any overflow of oil is prevented from getting on the cylinder and the clothing. The flexible bends are machined all over and polished whereby the flats can be set most accurately by means of the five adjusting points.

The cylinder screen is adjustable at three points, and the licker-in screen, when once set properly to the licker-in, goes with the licker-in as, due to grinding, the cylinder clothing wears down. The mote knives, likewise, conform to the movements of the licker-in and screen.

Our doffer slow motion, with gear and lever arrangement with a neutral position, is second to none. Due to the Whitin comb motion running in oil and due to the very carefully made and efficient comb box, our comb can be run at high speeds without heating up or becoming noisy.

The grinder motion is such that the flats are ground in the same plane as when they are carding, thereby assuring the same pitch being held by the clothing wire.

Lastly, the front stripping plates are easily adjustable, and, when once properly set, are so arranged that they follow the flexible bend as it is reset to allow for the grinding.

The Whitin Machine Works, believing that the wool system of handling cotton waste is preferable to all other systems, make a complete line of card feeds, full roller cards and roving condensers for the cotton waste trade.

Combers.

Do not throw out your combers! Buy more!

It is our belief that more combers than ever are going to be used. Why? Because a comber means quality in any yarn. A carded yarn of the same staple cannot equal a combed yarn in evenness, lustre, or breaking strength. One hears it said that silk and worsteds are being worn to the detriment of cotton fabrics. If so, this situation has to be faced. And how else than to produce cotton goods of such texture and quality as have never been seen before! With cotton prices around the 30-cent level, the public wants more quality, more for its money, before it will be willing to buy cotton-made goods again.

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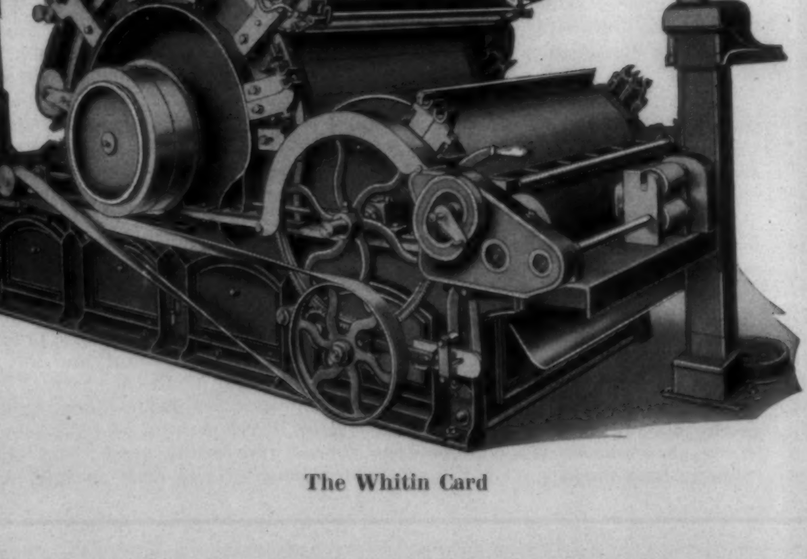
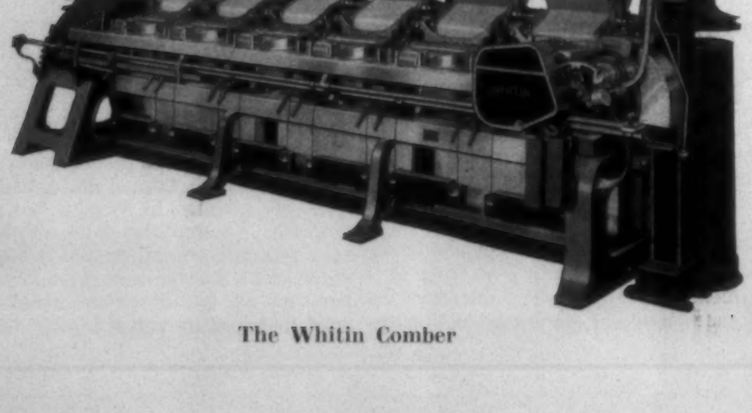
A comber stands for profit. On semi-combed work, taking out 7 per cent waste, a comber means 1-16 of an inch on the staple, and on fully combed work, ⅛ of an inch. And the resulting yarn is smoother and stronger—a great aid and advantage in the weave-shed where approximately half the cost of producing cotton fabrics is to be found.

On cotton ranging in staple ⅞" to 1 3-16", the Whitin Machine Works recommend the use of their Model "E," Nasmith type comber. This comber, built with a wide, heavy frame. highest grade of material and workmanship, simplicity of design, gives a high production. A perfect piecing with a long overlap

(Continued on Page 23)



The Whitin Card



The Whitin Comber

Nasmith Twin Combing Machine

THE subject matter in the Better Equipment Campaign in this issue is devoted to carding and combing, and the following description of the Nasmith twin combing machine is furnished by the makers, John Hetherington & Sons, of Manchester, England:

As seen in the illustration, this machine is two quite independent combers, built back to back on the same framing, and each may run or stop quite independently of what its fellow may be doing. It is driven by a single belt, although each comber —when more convenient—may have its own belt, with fast and loose pulley.

Advantages of the two-sided machine are:

1. Economy of floor space, shafting, pulleys and belts.
2. Great reduction in the distance traversed daily by the operative.
3. Setting all done whilst standing upright, in full light, in front of each machine.

The Nipper.

The Nipper hinges on a movable pivot fixed on a lever which is adjustable round the centre of the cylinder shaft. The adjustment of the nipper to the detaching roller is regulated by moving the nipper pivot, and as it moves concentrically to the cylinder the relation between the nipper and the cylinder needles always remains the same, no matter how the nipper is set to the roller. Further, this adjustment does not in any way interfere with the settings of the feed and top comb, which are quite independent of the nipper adjustment. All the nippers are adjustable simultaneously to the roller and a convenient index is provided to show the amount of displacement.

The nippers are very simple and light, and the swing has been reduced to 1⅝", no part of them moving more, and they no longer carry the top comb.

The lip of the nipper is kept high and supports well the lap behind the top comb, and as the nipper moves back it rises still higher instead of falling as formerly.

Top Comb.

The Top Comb, as stated, is quite independent of the nipper, swinging on its own fixed center, but rocking in time with the nipper. It can be removed from and replaced on the machine without the use of any instrument whatever. For cleaning, it is simply lifted and drawn forward into notches where it remains. A slight push causes it to fall back automatically into position.

Patented Variable Weighting.

Patented Variable Weighting of the leather-covered detaching rollers is a great improvement on the usual dead weight. The pressure on the roller varies from minimum to maximum and back again each stroke. When the roller starts up to back off and when reversing it is almost nil, and only begins to increase when detaching has commenced and reaches its maximum at the end of the detaching operation. Many and important advantages result, the chief being:

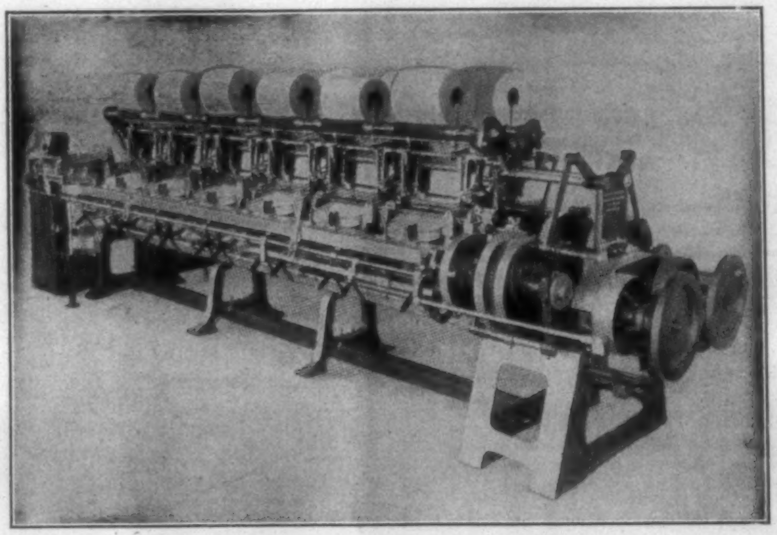
1. Life of the leather covering at least doubled.

2. Much heavier laps are easily worked because for the brief instant at the end of the detaching the pressure on the roller can be much greater than would be possible if it remained constantly on.

3. The strain on the roller-driving mechanism when starting and reversing the rollers is reduced almost to vanishing point, as at that moment there is scarcely any pressure on the rollers.

Patented Positive Grip Nipper Feed.

The Patented Positive Grip Nipper Feed is a secondary nipper sliding to and fro within the main nipper. At the proper moment it securely nips the lap and gradually feeds forward rather more than is required each stroke, the surplus being drawn back within the main nipper before it closes. Important advantages follow:



Nasmith Twin Comber Machine.

1. It will grip and feed any weight of lap, and short staple just as well as long.

2. It approaches much nearer to the nip of the detaching roller at the end of detaching than is possible with a feed roller and there is no long fibre left "floating" to be carried away as waste.

3. It effects a very great saving in waste without any sacrifice of cleanliness.

Patented Detaching Roller-Driving Mechanism.

The cam and sector are retained, but the clutch is dispensed with and a much more silent mechanism substituted, which takes less room and does not require to dwell when disengaging, so that the contour of the cam is made smoother and a slower start and a longer time given to the backing off avoiding the usual abrupt brusque movement.

Spare Lap Carrier.

A convenient arrangement is employed to enable the operative to easily place the heavy lap on its peg without lifting above her head and then push it up out of the way until needed. It is then pulled down again, easily turns on its peg for "readying" and finding the end and is on a level with its position when working. The effort of the operative is much reduced and much lap waste avoided.

Patent Cascade Lap Conductor.

This arrangement prevents the end of the lap from falling on the feed when the lap runs out, which often stops the machine or causes great damage to needles.

Other Details.

Five lines of rollers in the draw box, 20 rows of needles on the cylinder. Stop motion to each head. Full can stop motion. Any system of waste collection.

These machines are sold in America by Herbert Harrison, agent, of Boston, Mass.

Comparison of Semi-Combed and Double Carded Yarns.

A recent series of tests made with a view of using the Nasmith comber in place of a system of double carding or semi-combing, as it is termed, lead to the following conclusions in regard to using the combing machine:

First: The use of the comber in place of the second process card resulted in a sheen or lustre on the sliver that could not be attained by carding.

Second: The parallelization of the fibre accomplished by the combing process can not be expected by any amount of carding, thus eliminating one or more processes of drawing.

Third: Flat stripping on second process of carding would be likely to contain a high percentage of fibre as good, with the staple just as long as the cotton originally used, while the waste made on the comber contains no long fibres.

In reporting these tests, the expert who made them said::

"In other words, I should obtain more yarn from a given amount of raw cotton, when using a system of combing taking out 5 per cent waste, than I should expect to get from a system of double carding, as the long fibres which would be lost in the flat strippings would be retained in the combing process."

He further asserts that: "The general appearance of the yarn made by this process, plus the additional strength, would, evidently, command a much higher selling price; while the cost of manufacture would prove less in the carding and combing process than in the two processes of carding."

He also cites an instance of personal experience, valuable for comparative purposes, stating as follows:

"I have taken a similar mill to my own containing 126 cards, 8 of which are grinding, making 118 cards at work, and should expect to card 450 pounds weekly to produce a high-grade yarn from 1⅛ to 1 3-16 American cotton. If double carding was to be done this would mean 252 cards to produce 53,100 pounds of card sliver, added to this would be the Derby double system for making laps for finisher card.

"The cost per pound of this system (two processes of carding and one of doubling), including the card room oversight, would cost approximately three-quarters of a cent per pound.

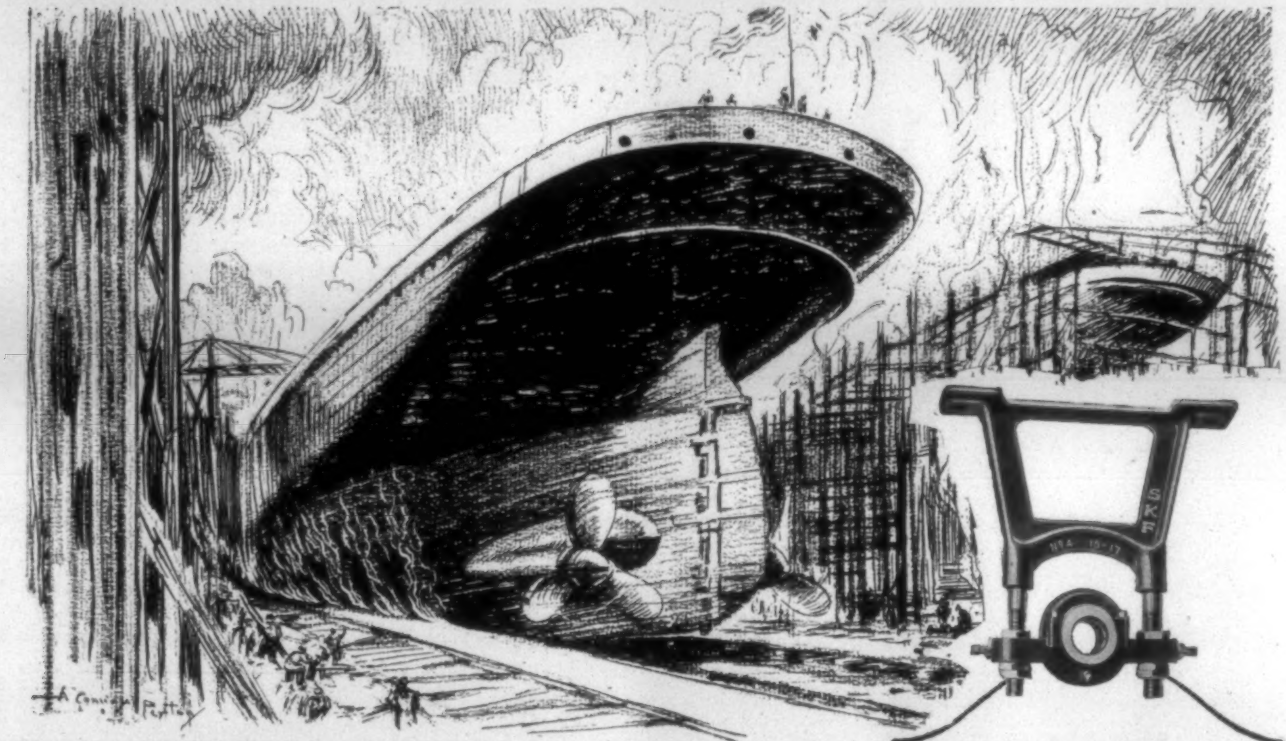
"The system of carding and combing would be 126 cards, the carding at slightly less than half the above cost, and 24 twelve-head combers at 2200 pounds each weekly, plus the necessary sliver and ribbon lap processes."

Cotton Weaving Industry in Italy.

The Italian Cotton Association has just made public the results of an exhaustive census of the weaving branch of the Italian cotton industry. The data given covers the situation as of December 31, 1923.

Returns have been filed by 380 firms possessing 115,644 looms out of 123,000 looms estimated as operating in Italy. Figures involving about 8,000 looms are therefore missing inasmuch as reports concerning them were not returned to the association within the period prescribed; but the absence of statistics relating to not more than 6½ per cent of the total looms was not considered of sufficient importance to warrant a delay in publishing the results of the census.

The 115,644 looms under review do not include those used for the making of ribbons. Of the 380 firms which have responded, 276 produce for their own account and 104 for the account of third parties. The former possess 99,214 looms and the latter 16,430. A total of 103,877 looms were reported as active and 11,767, or about 10 per cent as idle.



As the Ship Slides Down the Ways

A FEW swings of the sledge—the last wedge goes—and the new hull slides down the well-greased ways to the water. Smoke curls up as it gathers momentum. Just as the hull nears the water, the tremendous sliding friction causes flames to break out at many points on the ways!

The same holds true with the plain bearing hangers in your plant. Power starts the shafts revolving. More power is required to keep them turning. Although well-oiled-as the ship's ways—more oil is constantly required or the bearings will run hot and stick with consequent danger of fire, expensive repairs and shutdowns.

Why invite power losses and high lubricant costs that the sliding, dragging areas of metal in plain bearing hangers entail? A changeover to Skayef self-aligning Ball Bearing Hangers will pay for itself within two years time by savings in power and upkeep costs. Let our engineers submit figures.

See MacRae's Blue Book for Nearest Distributor

1142

SKAYEF

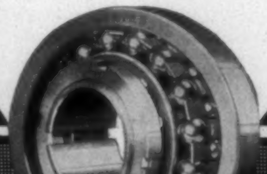
—the 4-Saving Hanger

1st Saving Skayef Hangers save from 50 per cent upward of the energy which plain bearings consume in friction. This means a saving of 15 to 35 per cent of your power cost.

2nd Saving Considerable time is saved by eliminating shutdowns for replacing or adjusting bearings; forced idleness of machines and men is a cost-factor too big to be ignored.

3rd Saving Lubricant consumption reduced 60 to 80 per cent as compared with plain bearing hangers. Lubricant required only at infrequent intervals and it cannot leak out and ruin belts or product.

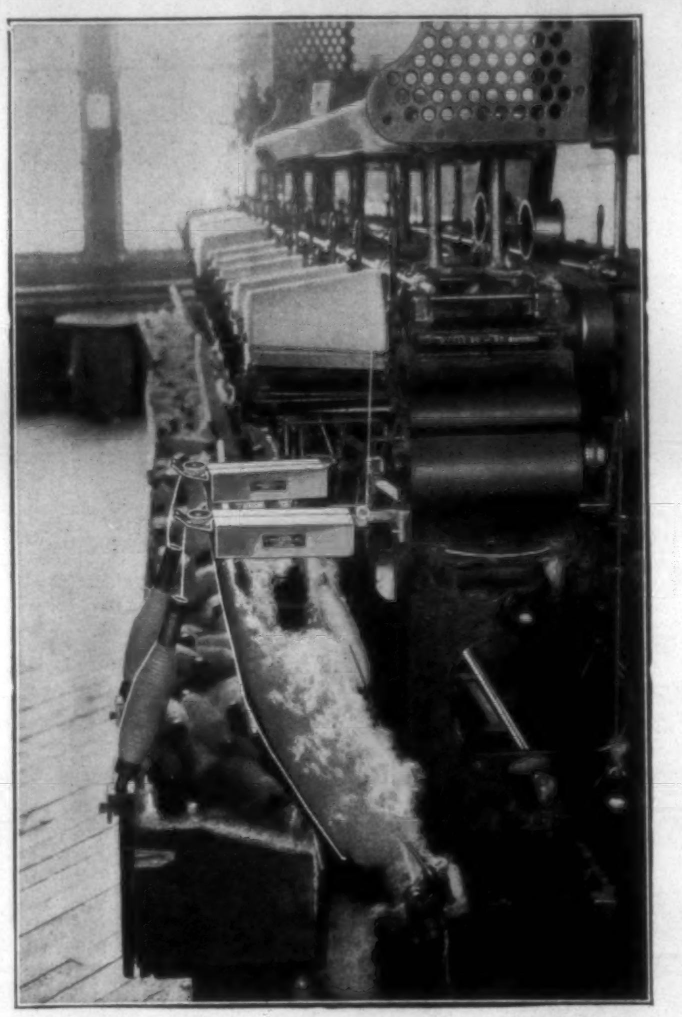
4th Saving There is no discernible wear of the hard steel balls and races and absolutely no shaft wear. Dust and grit cannot enter the bearings and Skayef self aligning ball-bearings have the exclusive inherent ability of compensating automatically for shaft deflections.



SKAYEF
Self-Aligning Ball-Bearing
HANGERS

Made Under
SKF
Supervision

THE SKAYEF BALL BEARING COMPANY . . . . 165 Broadway, New York City



Mr. Knitter—Do You Realize Your Loss From Waste?

How often do your knitting machines stop because of slubs—heavy and light spots in the yarn?

Do you know the loss of production from this cause? Do you know the amount in dollars and cents—that is, lost in waste that is thrown under the cutter's table due to cutting out holes through the use of imperfect yarn?

Do you realize the difference in production between running good yarn and bad yarn? With labor high, even the same percentage of waste in manufacturing becomes a heavier charge against your costs. Are you taking the best means of meeting this situation?

The successful men in the production of knitted textiles are those who, under the pressure of high prices, make use of the most effective methods of avoiding waste in manufacturing operations.

A Knitter can cut down waste in his plant and increase his production by using the best grade of yarn—that is, free as possible from imperfections. If a lower grade contains even one more imperfection to the mile of 30/1, it means fourteen more imperfections to the pound—fourteen thousand more imperfections to the thousand pounds; one thousand pounds is a small quantity to the user of yarn. Fourteen more imperfections is a severe handicap in the manufacture of any product.

You can positively cut down the waste in production by equipping your winder with the Eclipse Yarn Cleaning Device. By using this cleaner, any grade of carded yarn can be made a ninety per cent better knitting yarn. You cannot appreciate this fact until after you have used the Eclipse Yarn Cleaner.

If you knit direct from cones, take this vital matter up with your "Spinner"—he can deliver you a better yarn.

Ask us to send you full information—or better still—we will send our representative to give you an actual demonstration upon your request. When you write, please mention the type of winder or spooler you use.

Eclipse Textile Devices, Inc.
Elmira, N. Y.
Makers of
Automatic Yarn Cleaner, Automatic Stop Motion, Yarn Tension Device
Eclipse Van Ness Dyeing Machine

Proper Carding With Revolving Flat Cards

By a Representative of the Saco-Lowell Shops.

THE modern type of card, generally known as the revolving flat card, was first built in America about 1886, following English models which had come into quite general use in England. It is interesting to note that the first lot of revolving flat cards built in this country, some ten in number, are still in operation in the mill in which they were originally installed. They were so well designed and built, that there have been practically no radical departures from the original design. Improvements have been principally in shop methods of manufacture, greater accuracy in workmanship and in duplication of parts.

These facts have reduced the necessity for replacement of cards on account of obsoletion of design, as is the case with other processes in a mill, but the accuracy required in the setting of cards makes it very difficult to successfully repair worn bearings, journals and other parts affecting the settings. The importance of the cards' function in the production of yarn is so fundamental that a mill can ill afford to retain cards that have become badly worn, regardless of the design.

A question for a mill to consider in connection with carding is not so much that of replacement, as it is that of sufficient carding to obtain the necessary quality of work, and this is the point to which we wish to give most consideration in this article.

Light Carding for the Betterment of Quality.

By using a light lap and keeping a reasonable draft, the best conditions are obtained.

Some of the advantages of light carding are as follows:

Better settings may be made and maintained.

The licker-in will remain sharper longer, causing the cotton to remain on the points of the teeth; this presents the cotton to the cylinder in better condition. As there will be no big bulk of cotton passing the knives and screens, they will remain in place better.

The clothing will remain sharp longer.

The flats can be set closer to the cylinder.

As the cotton will be nearer the points of the wire, the card will produce better carding by laying the fibres nearer parallel and remove more dirt.

The upkeep of the cards will be a great deal less, due to not overworking the cards.

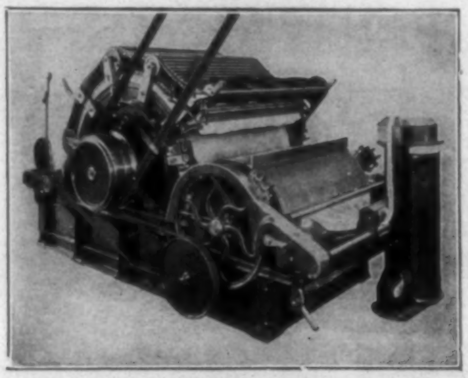
Cotton will not be loaded into the cylinder so rapidly and require less stripping.

With less stock going through the card there will be better air control so that better carding with less good waste will result.

Where strength is not the first consideration, a lower grade of cotton may be used giving as good results as far as appearance is concerned.

An operator can tend more cards, as he will not have to doff so often.

With these advantages, the extra cost of a few cards and floor space is more than offset by the better conditions and improved product.



Saco-Lowell Card

It is no doubt granted that the clothing performs the principal function of a card. The quality and condition of this part of the card certainly determines to a very large degree the quality of the work turned off.

With the clothing in good condition, however, much depends upon how much work one tries to make the card perform. With standard speeds, if one is satisfied to card only a medium amount of cotton, then the wires of the clothing have an opportunity to get at the individual fibres of cotton, straighten them into parallel positions and pick out and retain the seeds, leaf and trash.

When the quantity of cotton supplied to the card is increased, the fibres can receive only a smaller amount of attention from the points of the wire. An inferior web is then delivered from the doffer and much more seed, leaf and dirt escapes past the points of the wire and pass on with the sliver. Damage is thus started which cannot be overcome in the following processes, and an inferior yarn is sure to be spun when the quantity of cotton sup-

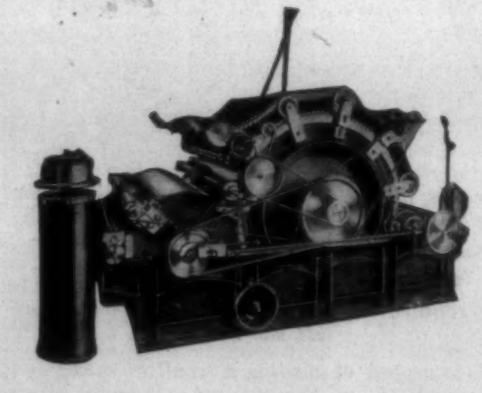
(Continued on Page 23)

SACO-LOWELL

Pioneer Builders of Revolving Flat Cards In America

New Charlotte Office and Shop

In 1886 we built our first revolving flat card, serial number one. With the exception of the number one card, the first ten cards are running satisfactorily today in the mill which originally bought them. The number one is now in our plant. On account of its historic value to us, we gave the mill a new card to replace it. We have just completed card serial number 47,763 at our Newton Plant, and we built 7,250 at our Lowell Plant. With the exception of those cards which have been destroyed by fire or accident, all of those 55,013 are running satisfactorily today. What more proof of the quality of the Saco-Lowell Card could a manufacturer want?



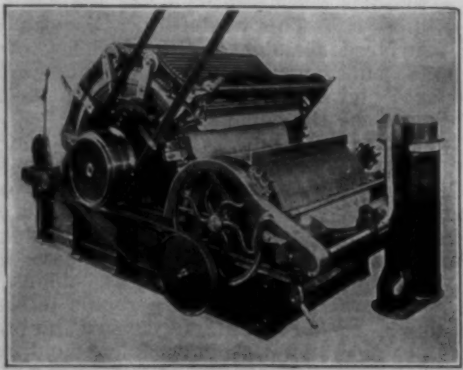
When a card leaves our shops we do not forget it. We have maintained for twenty-five years a repair shop in Charlotte for rewinding lickers-in and reclothing top flats. In this plant we use the same tools and methods that we use in our manufacturing plant at Newton Upper Falls, Mass.

Who could be more interested in the proper performance of Saco-Lowell, Lowell, Pettee, or Saco-Pettee cards than the builders of these machines?

If you do not know of the satisfactory operation of the Saco-Lowell Card Stripping System, ask your neighboring mills. We now have systems in operation from Maine to Texas. If you cannot find out where to go to inspect this system, write us, and one of our sales engineers will go with you, and let the system itself and the management of mill sell it to you. We know of no Presidents, Treasurers, Superintendents or Boss Carders of mills using our system who are dissatisfied.

If you want more proof, come to us and let us show its saving in dollars and cents.

Card lighter, use Saco-Lowell Repair Service, investigate and install the Saco-Lowell Card Stripper



SACO-LOWELL SHOPS

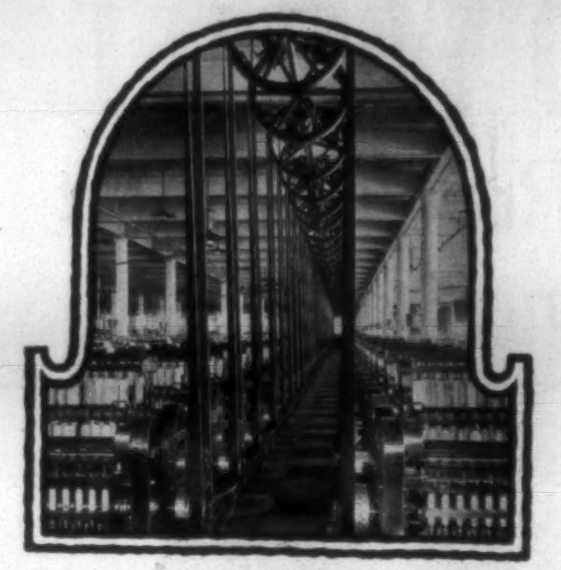
1824 1924

Sales Offices

No. 1 Federal St.
BOSTON, MASS.

1220 Mint St.
CHARLOTTE, N. C.

Masonic Building
GREENVILLE, S. C.



Get *steady* speed from your bicycle drives

Steady spinning speed requires a belt which won't slip. In order not to slip, the belt has to be "made for the job."

You'll find this belt in the Graton & Knight Standardized Series—a grouping of brands of Graton & Knight Leather Belts. The right belt for the right job, all through the mill as well as for your spinning frames.

All Graton & Knight Standardized Series belts are made of rugged, honest leather. The **standardized** belt for spinning frames is pliable and pulley-hugging. It pulls steadily without slippage. It is remarkably free from stretch. Does not require constant taking-up. It is, in short, the ideal belt for this use.

The other brands of Graton & Knight Standardized Series are made just as carefully for their particular work. And all are held to rigid standards of quality to guarantee uniform replacements.

Book 101-Q tells how textile mills can save money with Standardized Leather Belts. Write for a copy today.

THE GRATON & KNIGHT MFG. CO.
Worcester, Mass.

GRATON & KNIGHT
Standardized
LEATHER BELTING
Nothing takes the place of Leather

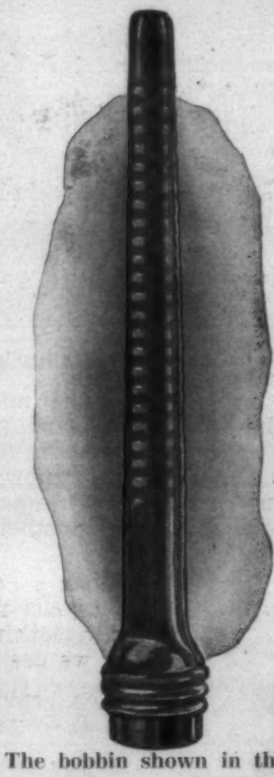
GRATON G-K KNIGHT

Reclaiming Bobbins By Textilac Treatment

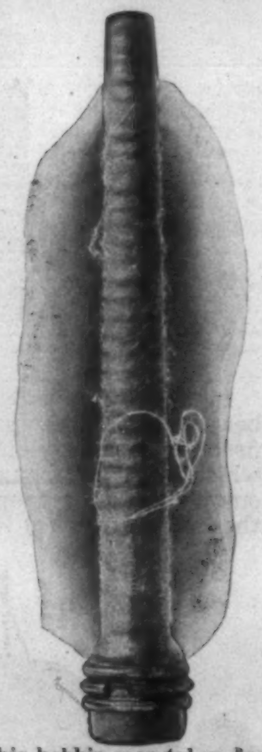
TEXTILAC is a treatment that reclaims and renews the life of filling, warp or speeder bobbins. A treatment, the first process of which removes all accumulations of lint, shellac, paint, oil, and grease.

Textilac, contrary to shellac or enamel treatments, not only coats, but penetrates the wood wall of the bobbin and prevents moisture or oil from penetrating.

Textilac permits yarn to be steamed upon the bobbin with no bad results to either bobbin or yarn. The Textilac Company points to dye houses that use Textilac-treated sticks in the dyeing machines, holding the yarn in boiling dye liquids five hours at a time and, when changing from one color to the other, allowing but fifteen minutes for washing them.



The bobbin shown in this illustration has been Textilac-treated and is steamproof, oil-proof and waterproof. It will not crack, splinter nor require re-reaming.



This bobbin was taken from a lot that had been enameled. It had been steamed only once, yet the surface softened, became sticky and produced enough tension to break the yarn before it left the bobbin.

The ordinary shellac surfaced bobbin is subject to knife cuts which splinter the surface and lower the serviceability. The elasticity of Textilac prevents splintering.

The enameling process has for its base a pigment that becomes hard and brittle, forming a shell about the bobbin which once cracked, ruins the whole surface. Textilac employs a special gum that can never become brittle enough to crack.

Most mills are obliged to ream their bobbins frequently to insure a proper fit. The shellac finish causes irregularity in the fit. Enameled bobbins also require reaming—a difficult and unsatisfactory operation because enamel is so easily cracked. Textilac leaves the fit perfect. The bobbin is locked in the correct size and shape and the surface cannot be cracked.

Textilac is used on all kinds of bobbins for cotton, worsted, woolen or silk yarns.

The Textilac Company makes the following statement relative to its process:

Many mills in the past have been using old and unsatisfactory bobbins, and have made a practice of discarding a small quantity of those in the poorest condition, replacing them with new ones. It was impractical to throw out a quantity sufficient to raise the quality of the work.

This wasteful practice can now be abandoned—the efficiency of every department can be increased substantially. Textilac is the answer to the bobbin problem.

While we have special equipment for cleaning and treating old bobbins, we also treat new bobbins direct from the manufacturers. A number of mills after trying Textilac on old bobbins, have had us treat all their new bobbins. This causes no more trouble to the bobbin manufacturer than the preparation of bobbins for the old enameling process and hence precludes any necessity for an extra charge from the manufacturer.

We also treat the heads of warper

(Continued on Page 35)

HOUGHTON

UNSEEN LOSSES

ONE of the greatest difficulties in any manufacturing business is the avoidance of "unseen losses." Experts sometimes call these "unseen losses" "unidentified expenses." But I have not much use for experts or expert terms, when common sense methods will apply.

Let me try in a common sense manner to explain what I mean by "unseen losses."

Suppose a steam coil in a tank springs a leak and the water ruins the contents of the tank, and the contents are surreptitiously permitted to run down the sewer; suppose after spending $100 to obtain a customer's trade our shipping department makes an error and ships the wrong variety and we lose the good will of the customer, and, of course, the $100 spent in obtaining that order. There is no account on our books where such losses may be identified or seen.

Suppose the frictional load in your mill is increased 10%, causing an increased consumption of fuel; suppose your belt slip increases 2%; suppose you lose additional time in repairing or renewing belting; suppose your conditioning causes poor finished cloth; you have no direct method of detecting such losses.

And yet to you as well as to ourselves, such losses will represent the difference between a normal profit and a loss.

It is a magnificent thought to create some mutual provision by which the mills may protect themselves against unjust claims made by their customers, but it is far better to reduce the liability of claims to the minimum by using products known to be manufactured by those of long experience and unquestioned reputation. It is beyond dispute that the better class of mill men, meaning, of course, the more successful, do this very thing.

In 1918 when E. F. Houghton & Co. were considering the consolidation with another interest manufacturing dyes (one of the many war babies), the experts who were called in to examine the books, marveled at the fact that over a period of 20 years, the losses from bad debts by E. F. Houghton & Co. were less than one-quarter of one per cent., while with the newer dye manufacturing concern the losses had been one-and-one-quarter per cent.

Our explanation was that, inasmuch as the Houghton Products commanded the highest price, it required intelligence to appreciate the superior quality warranting the higher price, and courage to pay it, and, therefore, Houghton's customers were for the most part the most intelligent and courageous concerns, which reduced the loss from bad debts proportionately.

I make no pretense at being "all wise." I have been stung as often as anyone, in trying to buy things cheap. I will wager that I have bought more automobile lemons than any reader, because I am a human being and subject to the influences of a good "argufier" in the shape of a salesman. But I know intuitively that every time I go out to obtain something for nothing, I usually find that I have paid something for nothing, and paid a good price at that.

And so it is with these "unseen losses;" a mill man will run through what he supposes to be a successful season and he estimates in his mind certain profits, but when the inventory is off and the books closed, the anticipated profits are not shown and there can be but one explanation and that is "unseen losses."

Cost systems rarely pick up these "unseen losses." They are something that must be prevented, not remedied.

It has been the rule with E. F. Houghton & Co. to never buy a "job lot of oils." I do not know how far back the rule originated, but it was before my time, which is 40 years back and the reason is that while you know how much you gain in price on these job lots, you never know what the "unseen losses" will be.

Uniformity of raw materials and supplies is one of the greatest preventives of "unseen losses." Houghton aims always at uniformity.

E. F. HOUGHTON & COMPANY
Works: Philadelphia—Chicago—Detroit
Distributors Located At

ATLANTA, GA.
1001 Healy Building
Phone: Walnut 4651

GREENSBORO, N. C.
P. O. Box 81
Phone: Greensboro 1990

GREENVILLE, S. C.
P. O. Box 1143
Phone: Greenville 2316

ST. LOUIS, MO.
418 N. Third St.
Phone: Olive 3559

AND IN EVERY OTHER TEXTILE MANUFACTURING CENTER OF THE WORLD

Oils and Leathers for the Textile Industry

Advantages of Light Carding

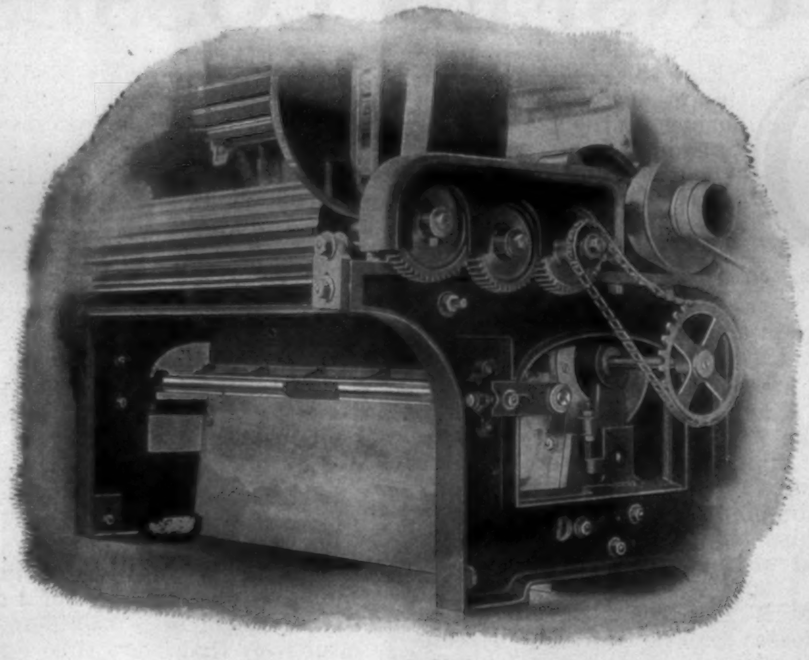
By the H. & B. American Machine Co.

IT is a well known fact that evenness and breaking strength of yarn are greater in mills having the proper equipment for good carding than in those mills in which the equipment is limited. There are a few mills today in which quality is secondary to quantity and in which an investment covering additional cards would appear to be unwise, but their number is so few (and becoming fewer in fact of the present competitive market) that they may be disregarded in connection with this particular topic.

In both long and short staple cottons, both carded and combed, there is a tremendous variation in the lengths of the individual fibres. The spinner is confronted with a handicap at the start and should prepare insofar as he is able to do so to overcome or at least prevent this initial condition from gaining momentum.

Installation of additional cards, representing a moderate investment, will allow a mill to reduce the weight of sliver and consequently the bulk of cotton passing through the card with the inevitable result of better parallelization of fibres. Stripping need be done less frequently, life of clothing is lengthened, quality of carding is increased

When carding a heavy sliver, many of the shorter fibres do not come under full action of the clothing and therefore are not straightened out to their full length and consequently the initial difference in length of fibre (which refers to parallel fibres drawn out to full length) is augmented by this condition.



DUPLEX CARDING MACHINE

This cut shows single Duplex, which is no longer made by H. & B. American Machine Company. They build the double carding device with two rolls exclusively.

Unequal lengths of fibres—which also mean heavy and thin places, since the fibres per cross section vary—are accountable for many of the troubles encountered in the following roller drafting processes and this variation is especially noticeable and troublesome when the spinning frame is reached. Here, nothing can be done but accept the yarn as it is spun—good, fair or poor.

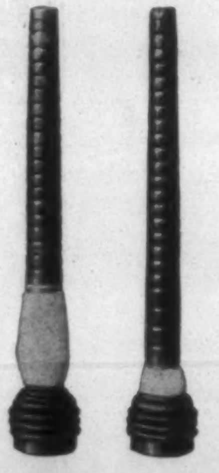
Duplex Carding Device.

The object of this appliance is to remove motes, leaf, short fibres and foreign substances from the cotton before it reaches the cylinder and flat wire. This device consists of rollers covered with special clothing placed underneath the licker-in and revolving slowly in the same surface direction as the licker-in. Doffing combs are placed in front of the rollers and remove from same the short fibre, motes, leaf and foreign substances, which then fall to the floor.

This device has no high speed parts to wear, and is so simple in its construction and operation that derangement is impossible, and consequently it requires very little attention. The amount of waste re-

(Continued on Page 39)

A Holcomb Automatic Bunch Builder
SAVES 80%
Of The Waste



Before Installation Holcomb Bunch Builder 50 yds. of waste

After Installation Holcomb Bunch Builder 10 yds. of waste

Our Guarantee

The "HOLCOMB" Automatic Bunch Builder is the result of years of development work by a practical mill man. It is fully perfected and has long been in successful operation in a score of mills. It is fool proof; has no wearing parts to get out of order; requires no oil; builds the bunch automatically only when the ring rail is lowered to doff; and requires absolutely no attention of the operator for setting or resetting. Remove the "personal element!" Remove the waste! Saves 80 per cent. Write now for our proposition.

OVER 2,000 INSTALLATIONS NOW OPERATING

In view of comprehensive patent protection granted any infringement will be vigorously prosecuted

Holcomb Bunch Builder Co.
Birmingham, Ala.

"Yes, Madam, Genuine Shelton"

Leading textile and silk manufacturers throughout the country know that it pays to trademark their goods for, as they themselves have told us, it proves to everybody that the goods are genuine. It shows the manufacturer is proud of the quality of work he produces. It links the goods definitely and directly to the national advertising.

And manufacturers also know that the one practical method of trademarking their goods is with Kaumagraphs. Trademarks are quickly and easily applied with Kaumagraph Dry Transfers—either by hand or machine—on the back, along the selvage, or as end stamps.

Kaumagraphed trademarks do not blur, smudge or become illegible. They apply your trademarks so beautifully that it reflects the quality of the product itself. Kaumagraphed trademarks are more easily and quickly and economically applied than by any other method.

Our Service Department will be glad to help you on **your** trademarking problems. Write for sample markings today, and for information about Kaumagraph service applied to your business.

KAUMAGRAPH COMPANY
Established 1903
7 E. Third St. . . . . . Charlotte, N. C.
New York Boston Chicago
Philadelphia.
Paris, France Paris, Ont., Can.

For trademarking textiles, hosiery, silks, underwear, etc. use—

Kaumagraphs

Building With Foresight

A few years ago we were asked to recommend changes in a mill which would provide greater capacity for normal growth of the business.

Our knowledge of markets and the possibilities for selling this manufacturer's product showed immediate prospects for a greatly increased demand—greater even than this manufacturer had foreseen himself.

Our plans, threfore, not only provided for immediate need for more room, but allowed for future expansion as market conditions changed.

Lockwood-Greene service meets requirements whatever they may be. We are prepared to do everything from the work of preliminary study of manufacturing requirements to the delivery of the finished plant. The Lockwood-Greene organization is composed of men of broad business and financial as well as engineering training.

Our experience covers many years of textile engineering. Ask us to send you a copy of "Building with Foresight"—a booklet illustrating Lockwood-Greene work.

LOCKWOOD GREENE

LOCKWOOD, GREENE & CO.
ENGINEERS

EXECUTIVE OFFICES, 24 Federal Street, BOSTON

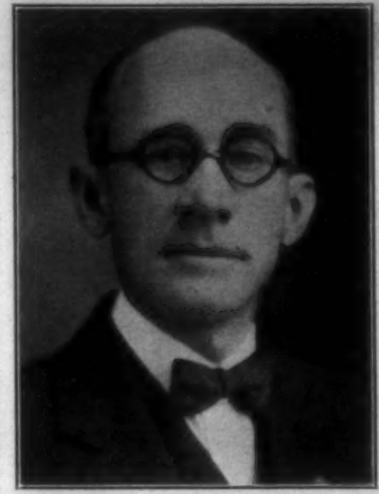
BOSTON ATLANTA CHICAGO NEW YORK
DETROIT CLEVELAND CHARLOTTE SPARTANBURG

Lockwood, Greene & Co. of Canada, Limited, Montreal
Compagnie Lockwood Greene, Paris, France

WHO'S WHO AMONG TEXTILE SALESMEN

J. S. COTHRAN.
(Machinery Agent)

James S. Cothran, of Charlotte, was born at Abbeville, S. C., July 26, 1869. He graduated at the University of South Carolina in 1890 and then attended Cornell University at Ithaca, N. Y.



J. S. COTHRAN.

After several years in practical cotton mill work, he entered cotton mill machinery business in 1898.

He was for three years in the engineering department of Stuart W. Cramer and for seven years with the American Moistening Company, and for the remainder of the time has represented a number of specialty firms, among them being Warren, Webster & Co, for thirteen years, and the Link-Belt Company, for eight years.

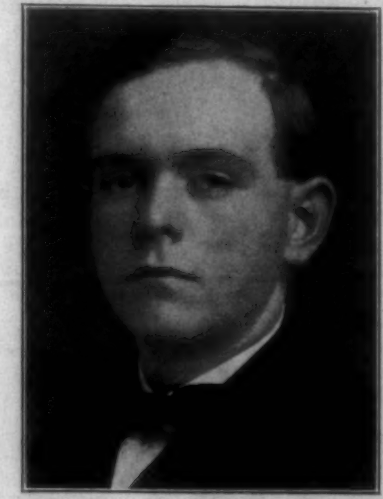
At the present time Jim Cothran has an office in the Commercial Bank Building in Charlotte and represents the following firms in North Carolina and South Carolina: Link-Belt Co., Spray Engineering Co., The Superheater Co., Warren, Webster & Co., Yarnall, Waring Co., The Ashton Valve Co., Parks-Cramer Co., and Moore Steam Turbine Co.

He specializes in products that require engineering ability as well as salesmanship, and his success is evidence of his ability in both lines.

Jim Cothran is married and has two daughters. He is an active member of the Rotary Club of Charlotte.

WILLIAM R. O'HARA.
(The Stafford Co.)

William R. O'Hara, or Bill O'Hara, as he is commonly called, is a railroad man who was converted into a textile machinery salesman and has made good in his new line of work.



WILLIAM R. O'HARA.

Bill's name sounds like he might have just come over from Ireland, but he was born at Greenville, Ga., on November 8, 1887, and while some of his ancestors probably came from the Emerald Isle, Bill's people have been prominent in Georgia for many years.

He attended and graduated at the University of Georgia and later in life took a textile course at the New Bedford Textile School.

He came to Charlotte about fifteen years ago as District Freight Agent for the Pennsylvania Railroad and made many acquaintances and friends in the textile industry.

When we entered the World War, he promptly resigned his position and entered an officers' training camp. After receiving his commission he was sent to France and was in the most active fighting section.

After the war he entered the shops of the Stafford Company at Readville, Mass., and was then sent to Charlotte as one of the salesmen for their automatic looms.

Bill O'Hara is a bachelor. He is a member of the Rotary Club of Charlotte.

Clark's Directory of Southern Textile Mills
Contains Complete data relative to Southern Mills
Pocket Size Revised Twice Yearly
CLARK PUBLISHING CO.
CHARLOTTE, N. C.

DU PONT DYESTUFFS

SULFANTHRENE PINK FF

The production of this dyestuff on a large scale constitutes a notable achievement of the du Pont Company. Sulfanthrene Pink FF compares most favorably with its prototype, Hydron Pink FF, being if anything, better in purity of shade, strength, solubility and dyeing properties.

It is offered in paste form particularly free of grit and other impurities for the piece dyer and printer. Sulfanthrene Pink FF is also available in powder form, being standardized to double the paste strength.

This latter product corresponds in all properties to the paste color and is prepared so as to dissolve easily and in a manner similar to the paste. The many advantages of using the dye in powder form will be apparent to dyers, and to all occasional users of vat colors.

Stocks and current production of this dyestuff are sufficient to amply take care of the needs of the country.

E. I. DU PONT DE NEMOURS & CO., Inc.

Dyestuffs Department

WILMINGTON DELAWARE

STANDARD-UNIFORM

Advantages of Better Mill Equipment

Articles Submitted in Prize Competition On This Subject.

Number Ten

I would first select a site that would be located to have advantage both in ventilation and light with proper drainage, then lay out building so as that from the time the cotton is received in mill until it is packed in finishing department that it would not be turned back but work forward all the time. A great many mills lose production because of lost motion in the manufacturing of the product. After the building was completed I would install humidifier system with automatic regulators, also with hot and cold regulator on heating system and use nothing but first-class material in all construction. Would have sanitary drinking fountains through the plant and have the health of the help in mind at all times, as you cannot get the highest efficiency with unhealthy conditions.

I would install machine shop with necessary machines to do all repairs and also have welding apparatus. Too much stress cannot be laid upon the importance of well equipped machine shop.

Then I would build my supply room in connection with the mill to carry all necessary parts for repairs with card index system, nothing going out except parts to take place of that piece worn out or defective parts. I have seen supplies carried out of supply room when the man that issued them did not know what they were used for or what they were but he was counted a supply man. Better have no man at all.

After I had made these preparations I would start to lay out my machinery to the best advantage and convenience of running at the smallest cost possible. The arrangement of the machinery plays a very important part in the manufacturing cost. I would so far as possible have safety appliance on every machine. After machinery was installed I would have an expert safety engineer go over plant and find what was needed in safety appliances.

I would want all individual motor drive where possible. Looms and spinning frames, cards and fly frames with individual motors.

I would build my opening room in connection with my cotton warehouse with conditioning room to hold twenty hours' run and I would keep that ahead of my openers. I would install vertical openers with fan and conveyer to picker room, where I would want condenser and automatic feed to breaker picker, which would run with three-blade beater, the speed to be governed by the staple of cotton that I was running. My intermediate picker would have two-blade beater. The finishing picker would have three-blade carding beater, all aprons with positive drive with ball bearings, all fan bearings and beater bearings ball bearings. I would have overhead conveyers from picker to cards and both the intermediate and finishing picker equipped to weigh each lap as too much attention cannot be paid to the eveners bearings and the adjustment of eveners.

After laps have been well cleaned the cards can then card the fiber. Cards should not be used to open the cotton. I mean by that the cards should not be made to perform the work that the picker room should do. The cards should be placed so that they could be kept perfectly clean and I will here make this statement, that after trying both, I would prefer vacuum cleaning system over blowing off system. The roller brushes should be kept in operation and the flat brushes should be kept clean. I would install card stripping device and after trying three different makes I would want the one with stripper roll and vacuum fan to take the dust out of room with overhead flue. With this device you can strip card in 40 seconds after card is slowed down. I would install enough cards so that I would not have to card over 100 pounds to the card in 10 hours.

I would have two processes of drawing with metallic drawing roll and too much cannot be said here on keeping drawing frame clean and the weights adjusted and flutes cleaned and frames lined and leveled. The trumpets should be watched and should not be over size. The right size trumpet is just as important on drawing frame as right draft gear on fly frame. The slubbers should be placed so that the drawing delivered would have to be carried only to position at back of slubber. Slubbers should be lined and particular attention should be given to the line and leveling of these machines. and I would equip them with all steel cut gears, as so often time is lost and production also from head gear being faulty. The presser should be adjusted properly. Too often has it been said and tried to be practiced on the theory that it makes no difference in numbers what size frame we have. We should first determine about what numbers we are going

(Continued on Page 38)

Howard Bros. Mfg. Co.
ESTABLISHED 1866
Home Office and Factory, Worcester, Mass.

Southern Branch Factory *121 South Forsyth St., Atlanta, Ga.*
Southern Branch Office *1126 Healey Bldg., Atlanta, Ga.*
E. M. TERRYBERRY, Southern Agent *G. L. MELCHOR, Asst.*

Cylinder and Doffer Fillets
Napper Clothing
Stripper and Burnisher Fillets
Emery Fillets

Top Flats and Lickerins Recovered and Promptly Returned

Tempered Steel Twin and Domestic Iron Wire Heddles
The Best Materials Obtainable Make Up Our Products

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Textile Products Worth $19,053,814 Made in Prisons

Textiles selling for approximately $19,053,814 were produced by convict labor in the State and Federal prisons of the United States during the fiscal year ending about June 30, 1923, according to the results of a survey published in the April number of the Department of Labor's Monthly Labor Review.

This figure does not include the textiles manufactured in prisons under the State-use system, which restricts the distribution of convict labor products to State institutions. It does include all textile products made by convicts and thrown upon the general market.

Of these textiles worth $19,053,814 a portion worth approximately $2,294,807 was manufactured under the public account system or to put it in another way, with the prison functioning as a textile manufacturer. This leaves a balance of textiles worth $16,759,007 made by prison labor for private contractors. And for the convict labor involved in the production of these textiles worth sixteen odd millions contractors paid the prisons $1,459,352.

The commodity figuring most prominently in these totals is the work shirt. During the fiscal year above-mentioned work shirts made by convict labor and released for general consumption sold for $10,837,944. Of this amount $227,538,000 should be credited to the public-account system, leaving a balance for private work shirt contractors of $10,610,406. For the convict labor involved in the production of these shirts worth ten and a half millions the contractors paid the prisons $751,531.

Next in order of value are work pants, which during the year totalled in value $3,826,645. This total amount represents garments made only for private contractors. For the labor involved in their production the contractors paid the prisons $381,605.

Children's play suits are next in importance, reaching a total value of $1,149,030. These also were made wholly for private contractors and for the convict labor engaged in their manufacture the prisons received the sum of $61,229.

Hosiery and underwear run a close fourth, the year's convict labor production reaching a total value of $1,073,195. Of this amount $17,143 represents hosiery and underwear made for public account. The total for private contractors was therefore $1,856,052. For the convict labor engaged in the manufacture of the goods represented by this last sum the contractors paid $203,065.

Prison made overalls and jumpers available for the general market reached during the year a total value of $830,250. The bulk of these garments worth about $759,038 were made with the prisons functioning as manufacturers. For the labor involved in making the balance, garments worth $71,212, the contractors paid the prisons $9,792.

The only fabric manufactured in prisons in any appreciable quantity was cotton duck, which during the year reached a total value of $828,552. No private contractors figured here, the total production being in the hands of prisons operating on their own account.

Aprons to the value of $329,365 were made wholly for private contractors. For the labor involved the contractors paid the prisons the sum of $52,000. About $117,038 worth of tailoring was done during the year.

Jacob Phinizy Dead.

Augusta, Ga.—Jacob Phinizy, 66, president of the Augusta Factory and the Sibley Manufacturing Company, and president of the Georgia Railroad and Banking Company, also head of other industries, died at his country home near here at 6:30 Friday morning. His death was not unexpected.

About two years ago, Mr. Phinizy fell and broke his hip and since then his health had been on the decline. He was born at Augusta in 1857. He was a son of Fernandid Phinizy, who was born in Oglethorpe county in 1819, and Miss Harriett Bowden, of Augusta. At the time of his death he was also president of the Graniteville Manufacturing Company at Graniteville, Warrenville and Vaucluse, S. C., the Augusta Factory and Sibley Manufacturing Company at Augusta. He served the city of Augusta in the capacity of mayor. Funeral services were held at St. John's Methodist church Saturday afternoon at 5 o'clock.

Twenty-Eight Graduates at North Carolina Textile School.

Twenty-eight young men graduated this year from the Textile School of the North Carolina State College, Raleigh, N. C. Graduating exercises were held Tuesday, May 27, and the students medal awarded by the National Association of Cotton Manufacturers was presented to W. E. Shinn, Georgeville, N. C. This medal is given to the textile student taking the four-year course in cotton manufacturing who has the highest excellence in his work. Maurice Hendrick, of the Cliffside Mills, Cliffside, N. C., made the presentation. Mr. Hendrick is a graduate of the Textile School and was the first graduate of this school to receive the medal in 1908.

The demand for graduates of the school is continually increasing, every member of this year's graduating class having secured employment.

During commencement week a new chapter of the Phi Psi Fraternity was installed. This is a professional fraternity and only textile men are eligible. The fraternity was organized in 1903 and now has chapters at all the leading textile schools. The chapter was installed by H. H. Hart, president of the Wolfeboro Mills, Wolfeboro, N. H., and A. E. Snyder, of the firm of Percy A. Legge, yarn commission agents, Boston, Mass. Twenty two textile men were initiated into the fraternity and two teachers. Professors T. R. Hart and Thomas Nelson.

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Cyclone was first to perfect the process of Heavily Zinc-Coating (or Hot-Galvanizing) Chain Link Fence Fabric by Hot-Dipping Process AFTER Weaving. Cyclone "Galv-After" Chain Link Fence Fabric represents the highest development in this new type of fence. Uniformly zinc coated. No lumps; no frozen or soldered intersections. "Galv-After" Fence Fabric lasts years longer. No annual painting.

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FENCE FABRIC

Cyclone Red Tag Fence

PROPERTY PROTECTION PAYS

Mayview Manor, Blowing Rock, N. C.

Mayview Manor, Blowing Rock, N. C., has been selected for the annual meeting of the Southern Textile Association, June 13th and 14th, and the joint annual meeting of the North Carolina Cotton Manufacturers' Association and the South Carolina Cotton Manufacturers' Association on June 27th and 28th. It is a beautiful and modern hotel located upon one of the highest of the Blue Ridge Mountains.

Artificial Silk Used by Shanghai Co.

Artificial silk is being used by a Shanghai company in the manufacture of dress trimmings, according to a report from Trade Commissioner G. C. Howard, Shanghai, China. It is stated that no preference is felt as to the source of the raw material, but at the present time it is being bought in Italy on account of lower prices there. Samples and prices of some of the trimmings manufactured by this company will be made available upon application to the Textile Division, Bureau of Foreign and Domestic Commerce, Washington. Refer to File No.

Imports of Cotton Cloth Declining.

During April there were 12,733,139 square yards of cloth valued at $2,704,273 imported at New York compared with 14,631,196 square yards valued at $2,939,216 during March.

ROGERS FIBRE CO.

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78 Fifth Ave., New York

Cotton Umbrella Cloths

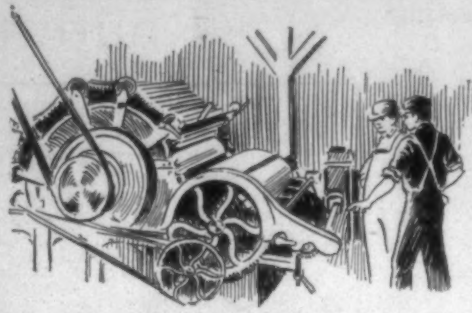
THE modern umbrella, as a shield from the rain, is a comparatively recent product of the practical West, but as a shade from the sun—its orginal use—it shares a common origin with the sunshade, an article of purely Eastern invention. Known to the Chinese many centuries before the Christian era, the sunshade is mentioned in the ancient writings of India and is pictured on Assyrian bas-reliefs and Egyptain tombs, as a sacred emblem and as a symbol of rank and power it continues to be used in the East to this day. Classical Greece saw another phase of the sunshade's evolution; in those heroic days it had become an article of luxury for the use of aristocratic ladies. In due course it was adopted by Rome, but continued to be regarded as an article purely for feminine adornment, despied by men as a mark of effeminancy. Eventually in those lands where the skies are nearly always cloudless it gained a certain popularity as an article of utility, and towards the end of the 16th century was introduced into France and subsequently became known in England.

The adoption of the appliance as a screen from the wind and rain was a naural evolutionary development in acountry so frequently shrouded in clouds and mist, and during the 17th century the umbrella gained a certain notoriety in London, although up to the early days of the 18th century it was declined by the cavaliers of those times as "unmanly," and found a restricted use by the fair sex only as a protection from the rain. Then came Jonas Hanway, eccentric traveler and philosopher, who sought to impose on his fellow countrymen his idea that men should carry umbrellas. At first derided by his contemporaries, he finally had the satisfaction of seeing his example followed, although apparently the umbrella of his day was an **extremly clumsy** contrivance, having ribs of whalebone or cane and a cover of oiled cloth. About the middle of the 19th century Samuel Fox invented the steel frame, the advent of which marked the real beginning of the modern umbrella's history. It may be claimed, however, that the cotton covering specially constructed for purposes has been in the largest measure responsible for the universal popularity which the umbrella enjoys today as it provided a covering material of great durability at a cost within the reach of all. While there have been many modifications and improvements in umbrella frame construction during the past 70 years, the main features which Samuel Fox embodied in his invention remain unaltered to this day, and "Paragon" continues to designate the troughed-steel frame the world over. On the other hand, the development of cotton umbrella cloth during the past half century has been phenomenal. The earliest cloths specially manufactured for umbrella coverings were known as "Reginas," twilled cloths in herringbone and other fancy borders, dyed in the piece by a direct process in dark colors, such as myrtle, prune and navy. These cloths were given a simple press finish by being passed through a calendering machine, and although the colors were not particularly fast and the cloths themselves somewhat rough to handle, owing to the grades of yarn used, these forerunners of modern umbrella cloths enjoyed a considerable vogue for some years. They were eventually supplanted by fabrics known as "Imitation Silks," the mercerizing processes to which these cloths were subjected adding luster to them and tending to make the cloth stronger and more resistant to wet.

The question of finding a medium for dyeing the cloths in a black that could be guaranteed fast to light and unaffected by varying climatic conditions continued to intrigue the producers of cotton umbrella cloths, however, and experiments were made with aniline black, which differed from all other dyestuffs inasmuch as it was produced on the fabric itself by a process of oxidation. Special cloths had to be constructed to withstand the rigorous nature of this treatment, and the process was first commercially applied to umbrella cloths about 35 years ago. The introduction of the aniline black process was perhaps the most important step forward in the production of umbrella cloths, and it quite superseded the direct process of dyeing previously employed, producing a richness and depth unequaled by other blacks and at the same time being one of the fastest dyes known. Development in the manufacture of the cloth itself had also proceeded apace, and a much wider range of cloths was available than in the days of "Reginas," the taffeta and sateen weaves having been introduced in addition to reconstructing the twilled qualities. The application of the Schreiner process in 1895 marked the next milestone in the modern cotton cloth's history, and it provided the medium for varying the finishes considerably. The process consists of giving the cloth an embossed effect by impressing it beneath a steel bowl or roller engraved with fne lines. Under great pressure the surface of the cloth is broken up into minute and highly glazed ridges, which by reflecting the light, imparts a silky sheen to the material. By varying the fineness of the lines and their angle on the roller in the engraving process a great variety of finishes was possible, and, in conjunction with the mercerizing process the appearance of the qualities was considerably improved and their value for umbrella purposes enhanced.

To meet the broadening requirements of umbrella manufacturers in different countries, qualities with repp selvedges were introduced in imitation of the silk and half-silk cloths, which still further extended the variety of cotton cloths on the market. These selvedges continue

(Continued on Page 32)



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And you get one-third more life from card clothing, due to its being kept free from oil.

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S. T. B. 6-5-24

The Blowing Rock Meeting

WE are advised by the management of Mayview Manor at Blowing Rock that 160 have already secured reservation for the meeting of the Southern Textile Association on June 13th and 14th, and from past experience we know that forecasts an attendance of from 300 to 400.

We are also advised that the cold weather has delayed the blooming of the azalea and rhododendron and that they will be in full bloom on the mountain top just about June 13th.

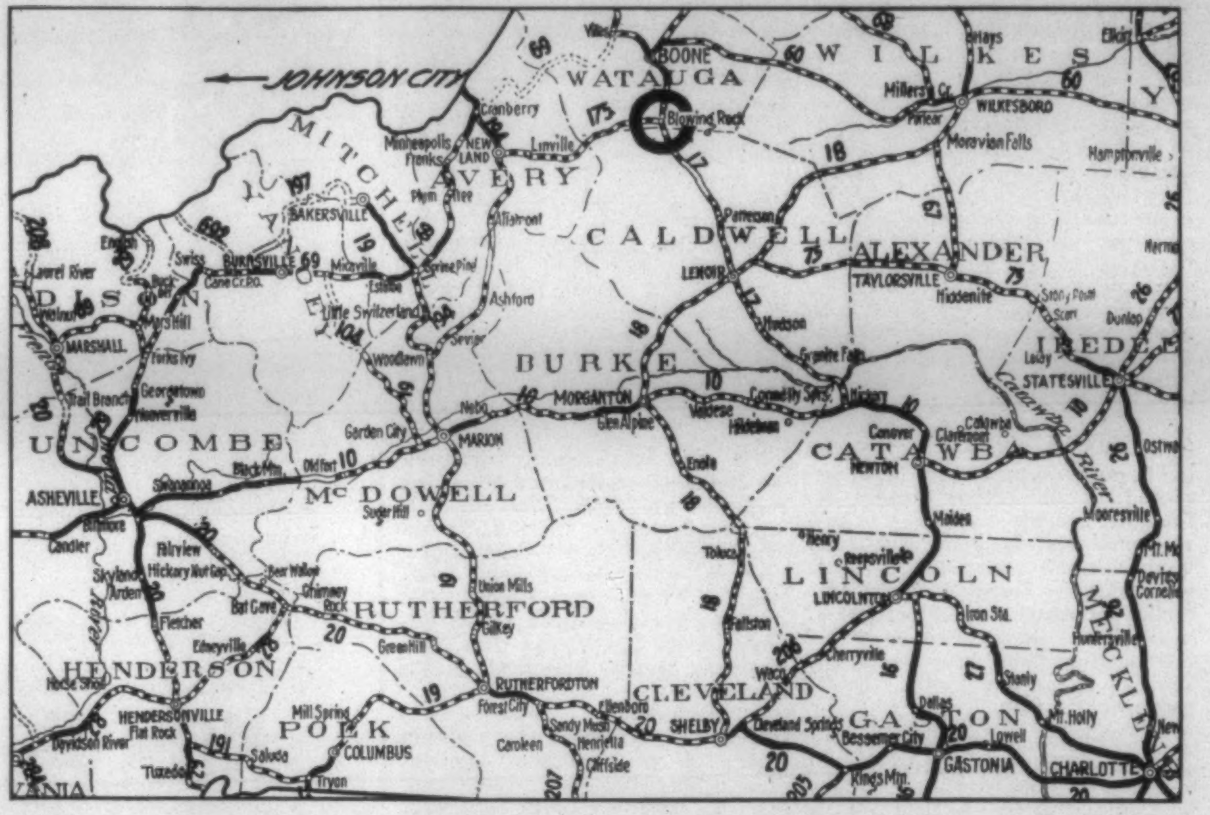
In the adjoining columns we are publishing a road map and describing the routes to Blowing Rock.

Two special cars will arrive at Charlotte from Atlanta on Thursday morning and it has been decided to carry the Georgia men by Statesville and Taylorsville because of the splendid hard surface road to Statesville.

A general movement is on foot for those who are going up in cars to carry those who will not have their cars. Men with cars are asked to stop at the hotels at Gastonia and Hickory to pick up such men. Stickers with the letters **S. T. A.** will be sent motorists with the request that they put them on windshields and any member will feel free to ride in such cars.

The fact that the Oasis Shrine will hold a meeting at Hickory, N. C., June 13th will probably mean a larger attendance at Blowing Rock.

Route to Blowing Rock, N. C.



The above is a section of the road map of North Carolina and shows the routes to Blowing Rock, N. C.

There are several routes that can be taken.

(1) From Charlotte to Statesville to Taylorsville to Lenoir to Blowing Rock. This is the route that will be traveled by the Georgia and Alabama men who reach Charlotte by train 9:30 a. m. June 12th.

(2) Gastonia to Lincolnton to Newton to Hickory to Lenoir to Blowing Rock.

(3) Shelby to Morganton to Lenoir to Blowing Rock. Those coming from South Carolina can reach Shelby from Spartanburg via Chesnee, or from Blacksburg, and will find this the shortest route.

(4) Asheville to Morganton to Lenoir to Blowing Rock. Those who can reach Asheville from Greenville, S. C., will find this the most beautiful route.

Note—Those going in cars are requested to stop at the Hotel in Gastonia and Hickory and pick up those who desire to go to Blowing Rock.

VICTOR MILL STARCH – The Weaver's Friend

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Proper Carding With Revolving Flat Cards

(Continued from Page 10)

plied to a card is increased beyond reason.

It is of the greatest importance trat cards be kept in a high condition of repair, especially as to lickers-in, clothing, mote knives, screens, bearings, combs and flat chains. Due to the nature of their usage, the lickers-in and clothing are needing constant attention. The card clothing manufacturers, and one of the textile machine shops, maintain in the South well organized and equipped shops for rewinding lickers-in and reclothing flats.

The exact amount to be carded by each machine is difficult to state, as conditions vary very widely, but light carding is a good term always to be kept in mind where quality of yarn is essential. If a last straw will break a camel's back, then surely a few extra pounds of cotton carded a day will defeat the object for which a good carder is striving.

Below is given a table with suggestions for speeds, weight of sliver and production for various types of cotton, for general classification of yarn.

Organization of Carding as Related to Quality of Product.

Increase of weight per yard of card sliver compels longer drafts on drawing and roving frames, which in most cases is objectionable.

If compelled by circumstances to increase production at the card, it should be accomplished by increasing the speed of doffers, not by increasing the weight per yard of sliver.

On the other hand, if a change to higher numbers of yarn apparently brings about a surplus of carding power, it is well to keep the whole of the cards occupied, taking advantage of the surplus carding power by applying it to the production of lighter slivers, cleaner work, shorter drafts in drawing and roving, and generally higher grade yarns.

Finally in reference to carding, no mill is complete without a modern equipment for stripping and cleaning the cards. There are on the market highly developed equipments for stripping, conveying the strips to the opener or picker room and removing dust from the card room. There are also efficient exhaust cleaning systems, to be used in conjunction with, or as a part of the stripping equipment. These instllations enable the cards to produce better work, make better working conditions for the operatives, and save labor costs.

CARD SPEEDS AND PRODUCTIONS.

	R.P.M. Cyl.	R.P.M. Dof.	High Limit Surface Speed of Dof. in Yds. per min.	High Limit Wgt. per yd. sliver in grains.	Grains Del'd. per min.	Sq. Ft. of Cyl. Surface Engaged per min.	Sq. Ft. of Cyl. Surface engaged per grain of sliver produced.	Cotton, Staple, Yarns.
A	165	3	7.29	.85	255	7316	28.65	Sea Island, Egyptian Peeler—Fine Combed Yarns.
B	165	6	14.58	50	729	7316	10.0	American 1⅛" 1 1-16" Medium Fine Yarns.
C	165	9	21.87	60.	2312	7316	5.57	American 1" to ⅞" Medium Coarse Yarns.
D	165	12	29.16	65.	1895	7316	3.86	Short Staple American, China and India—Coarse Yarns.

Advantages of Light Carding

(Continued from Page 7)

is made even on very short staple cotton.

Our Model "D2" combing machine, Heilmann type, we recommend for staples from 1 3-16" upwards, although this machine handles short staples as well as the Model "E." This is an 8-head machine, as compared to the 6-head Model "E." There is practically no vibration to this comber, and, in every way due to the expert workmanship put into our combers, it is eminently fitted to and does gives excellent results.

On both types of Whitin combers, the percentage of waste is easily and accurately controlled. Both combers are equipped with stop motions for each delivery and one for the coiler. We can give the mills the choice of three different methods of handling the comber waste—either by a doffer and comb—the Whitin waste condenser, or the Roth aspirator which we now are building.

Every mill desiring a quality product should have combers in their mills, and, as the "Better Equipment Campaign" puts it, we, the Whitin Machine Works, are only too glad if, in any way whatsoever, we can be of assistance to any of our friends—the cotton mills.

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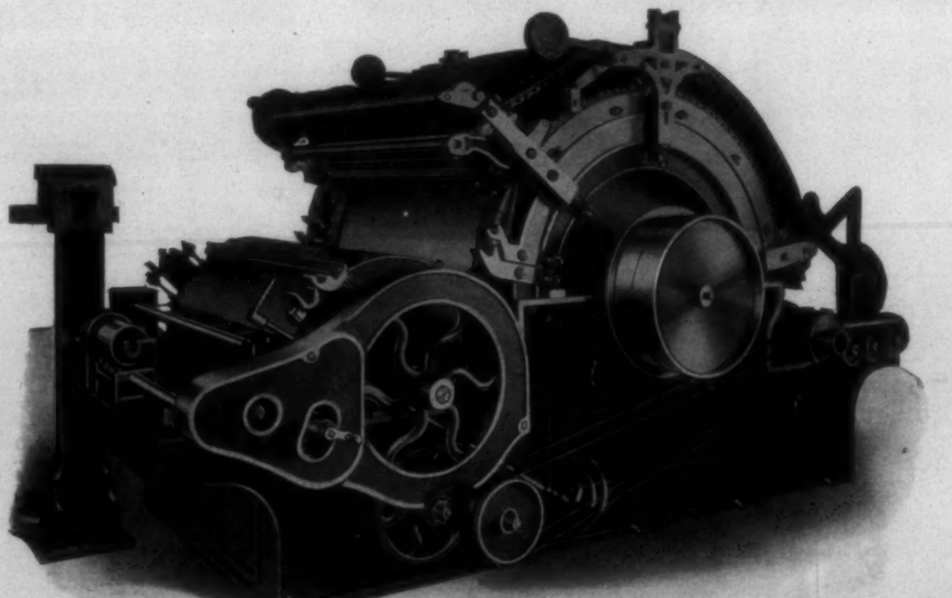
COTTON MACHINERY



DAMAGED PAGE(S)

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Dyer and Chemist in Industry

By Raymond L. Burnett, of E. I. Du Pont de Nemours & Co., before Textile Association of the R hode Island School of Design.

YOU may have been wondering why a place on this program has been given over to a representative from the dye industry, for in your mind, the part played by the dyer in the manufacture and marketing of a fabric may seem small and unimportant. I realize that only a very small percentage of your membership is made up of dyers and chemists, nevertheless the marketability and usefulness of the fabric which you have carefully designed, calculated, manufactured and processed will depend in a large measure on the skill of the chemist and dyer.

The selection and blending of shades to be produced is the work of the artist and designer, the production of these shades on the fibre or fabric by the dyer is a more difficult matter for it is not only necessary to match these shades exactly, thus carrying out the color scheme of the designer, but what is equally difficult, to produce these shades in the proper degree of fastness to exposure, wear, etc. The art of dyeing is no longer a mystery. The chemistry departments of our colleges and textile schools, such as the School of Design, have revealed the secrets of the old-time dyer and have placed this art on a scientific basis, yet, with all the facts known, the dyeing process presents difficulties which challenge the best efforts of well-trained, highly skilled chemists and dyers.

It will be my endeavor, in the time allotted me, to show the interest of the dye manufacturer in the problems connected with the application of his products to the materials, such as cotton, wool and silk, in the process of manufacture; also to link up, if possible, in your minds, a few facts in connection with the making and marketing of the dyestuff.

The manufacture of the dyestuff is a deeply interesting but very much involved study and it is impossible to touch even the high spots of the process. A few facts, however, may be of sufficient interest to mention. There seems to be a popular idea that the production of a dyestuff is no more involved than the manufacture of paints, soaps and some other common materials. There are, however, many stages in the making of the dyestuff. It requires a lively imagina tion to picture the bright color of a hat or gown having had its beginning in a lump of coal and that the second stage was a mass of tar, similar to road oil, and that from these crude products by various processes of distillation, nitration, sulphonation, etc., in some cases under pressure, in others in a vacuum, gradually the dye is formed and finally standardized and finished. The finished dyestuff itself would not excite admiration because of its beauty, but in the hands of the dyer produces those effects on the fabric which delight the eye and make the fabric attractive and desirable.

The process is not as simple as this, however, and every stage of the work is under the careful supervision of highly trained chemists and chemical engineers. Before the work can even be started the necessary information regarding the make-up of the dye has been determined by research chemists, this stage sometimes taking many months. If they are successful the process is laid out and the work done first on a small scale to determine if the process is practical. It is then transferred to large scale production.

The manufactured product is not finished until it has been standardized and this final stage is one of the most exacting. The dyestuff is brought to the shade and strength of a standard previously established and each lot is triple checked to insure each delivery of the color being uniform. After standardizing, the color is accepted by the sales department and is ready for the market.

We are apt to think of dyestuffs as being used wholly for coloring textiles, such as wool, cotton, silk, etc Considerably more than 50 per cent of the dyestuffs produced are used for this purpose but large amounts also go into the coloring of paper, printing wall paper, typewriter ribbons, printing inks, for coloring jewelry, staining wood and for coloring foodstuffs and drinks. If the statisticians are not misleading us, a considerable quantity of dyes last year went into the manufacture of cosmetics, rouges, eyebrow pencils and lip sticks. It is quite evident that we come into contact with dyestuff at some point whether we are conscious of the fact or not. Doubtless none of us, however, are interested in dyestuffs as applied to the cosmetic industry so we will confine our attention to their application on textiles.

A word at this time might be of interest regarding the size of the dye industry as compared with some of our other industries, for instance, the textile industry. Last year, according to the figures given by the tariff commission, the total production of dyes in the United States was approximately 92 million pounds, valued at about 50 million dollars. This value compared with that of the steel, textile and other large industries does not bulk very large. Anyone, however, who went through the experience of 1914, 15-16 can testify to the importance of the industry and the absolute need of a source of supply right here in America.

To give you an idea of the extent to which the American industry has taken care of the needs of the textile industry, let me quote from the report of the tariff commission. Before the war 93.5 per cent of the dyes used in the country were imported, the remaining 6.5 per cent were made here, but were made from imported intermediates; in fact, we were entirely dependent upon imported supplies. In 1923 all but 4 per cent of the dyes used here were manufactured in America.

In many industries and for many years American manufacturers have demonstrated their ability to market at low prices, products that could be produced in quantity. This has been true of the dyestuff industry even though they have not had long years of experience to draw upon.

Products made by dye manufacturers and used in greatest volume by the textile mills are indigo, sulphur black, direct black and acid black. The first of these, indigo, was first put on the market by an American manufacturer in 1917. Last year 28 million pounds were manufactured and sold at but slightly more per pound than the imported product pre-war. Sulphur black totalled in 1923, 16 million pounds. Direct black totalled 7 million pounds and acid black 2½ millions. Sulphur black sells for less money per pound today than the same strength of black sold for pre-war. The difference between the selling price today and that of pre-war days of direct and acid blacks does not represent the difference in labor costs between 1914 and the present day, to say nothing of the labor costs between Europe and America. America has supplied all the needs of the textile industry of the above products and has had large quantities for export trade. This supply has been furnished, too, at a price that compares with the selling price of 1914, when nearly every other article on the market is from 50 to 100 per cent higher than at that time. These facts demonstrate the solidity of the industry, the presence of healthy competition, the accomplishments of a force of research chemists and chemical engineers and the resourcefulness and aggressiveness of these manufacturers. The quality of these products has been of the highest. In the words of the Department of Commerce, "Dye for dye these products are the equal in every way of the best imported products."

The above outline covers some of the accomplishments of the American dye industry since 1914. These accomplishments have been possible because of the ingenuity and resourcefulness of the American chemist. As much room for improvement exists in the field of the application of the dyes to textiles as exists at present in the field of dye manufacture. As students of chemistry and manufacturing, your interest should be here.

Just prior to the war considerable attention was being given to the application of fast colors on fabrics, more particularly on cotton. During the war, due to the scarcity of dyestuffs, this development was stopped. Since the war, however, very rapid strides have been made in this direction with the results that efforts of manufacturers in many lines have been directed toward putting faster shades in their lines.

If any of you visited the exhibit of fast colors on various fabrics shown some two months ago in connection with "Truth Week," you must have been impressed with the emphasis placed by the mills represented and by the exhibit of the Department of Commerce upon fast colors. In the past only fabrics of the best grade were dyed with fast colors; now the aim of manufacturers seems to be to put the fastest colors into even the poorest fabrics if they are to be used for garments that are to be washed or exposed to light. For some time past many of the mills in the South making low grade ginghams have dyed their yarns with vat colors. The cheap fabrics, such as percales, have for some years been printed with vat colors by one of our largest print works. Thus fabrics dyed with the fastest colors known are available to the poorer class of people. The policy of offering fast colors on the cheaper fabrics is a form of practical economy that should appeal to the buying public and insure a ready demand for the products of such a manufacturer.

Another development of the past few years has been the dyeing of vat colors on cotton piece goods. This is a development of American chemists and dyers and has been brought about only after careful research and expensive trials. Many fabrics, including dress goods, shirtings, etc., are now being dyed in this manner and are finding ready acceptance in the retail trade.

Developments, such as the above, are made only with the team work of the mill executive, the dyer and the chemist and worthwhile results are finally obtained only after exhaustive and painstaking work along the line in question.

The textile chemist also has the opportunity of directing his efforts along the line of research looking toward the improvement of processes, improving the manufactured product or the development of new products. Review the history of dyeing processes during the past twenty years and it will reveal very little advancement in the methods used. New colors are constantly being put upon the market and frequently groups of these products require special dyeing methods, but in the main we are using the same methods of dyeing that we were whe nartificial dyestuffs were first introduced.

The textile chemist is frequently the mill's purchasing agent for dyestuffs. Working in harmony with the dyer this should be an excellent arrangement, for these two individuals are the best equipped by training and practical experience to handle this phase of work. When the chemist steps into this position, however, he proves very quickly whether his education and training have given him that broad, grasp of affairs which will enable him to make his decisions after a careful consideration of price, quality, reliability of source of supply, uniformity of deliveries and responsibility of the manufacturer, or whether he places the greatest emphasis upon price and makes his purchase after his find-

(Continued on Page 32)

Your Mill

Are the town folks proud of it?

Does the passing public admire it?

Does it blend into the landscape, or does it stand out stark and naked?

A few vines planted at the base of the walls will in a few years soften every sharp angle of the building; properly placed, low-growing shrubs at the foundation will tie the mill to the ground, giving it such an attractive appearance that each employee will be proud to work in it. Better goods will be turned out.

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Graceful plants and careful planning will make the mill as attractive as one of the old vine-clad churches of England without in any way obstructing the light or the utility of the building.

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Member of Associated Business Papers, Inc.

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CLARK PUBLISHING COMPANY
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Light Carding

THE "Better Equipment Campaign" has this week reached the carding and combing department and has under discussion the question of light carding and combing.

If we were asked to name one thing that would assist the cotton mills of the South in becoming the most efficient in the world, we would say, the addition of more cards.

Seventy-five per cent or more of our Southern mills are without an adequate supply of cards and because of that fact do not get the maximum production from their spinning frames.

We referred in a previous editorial to a mill that ran 30's warp regularly at a front roll speed of 128. That mill has an abundance of cards and is able to card light.

The labor cost on cards is very small, in fact is much smaller than most manufacturers realize.

Many mills could double their number of cards and hardly notice the difference in their payroll and yet as a result of the additional cards the production of the spinning frames would be so greatly increased as to much reduce the cost per pound of production.

We all know that when cotton is double carded the spinning can be run at a higher speed and with much reduced waste and to a greater extent the same thing applies in combing. If double carding and combing helps so much, light carding will do a great deal.

Some mills are adopting very light combing, that is, combing out only a very small per cent and making yarns that can not only show high production on spinning but being higher prices than carded yarns.

Light carding costs nothing from the labor standpoint because the increased spinning production more than equalizes the slight increase in carding labor.

The interest on the cost of the additional cards and a considerable portion of the cost is met by the reduction in production cost and the higher price obtained for the yarns or goods.

The addition of cards will be found an exceedingly profitable investment by almost any cotton mill.

Child Labor Resolution

THE U. S. Senate passed on Monday night a resolution to submit to the States a constitutional amendment giving Congress the right **to limit, regulate or prohibit the labor of children under 18 years of age.**

No bill has ever been passed by Congress under the influence of such an intense campaign of misrepresentations, half truths, juggled statistics and absolute falsehoods.

The country and the members of Congress have been made to believe that little children of 10 and 11 years of age are slaving their lives out in Southern cotton mills.

With, the propaganda arousing public sentiment and the members of Congress facing an election it was impossible to defeat the passage of the resolution but we were able to come within six votes of defeating it.

The Senators who voted against the Child Labor Amendment that is against transferring the powers of 48 States to a Washington Bureau were as follows:

Republicans — Borah of Idaho, Gooding of Idaho, Moses of New Hampshire, Reed of Pennsylvania, Smoot of Utah, and Wadworth of New York.

Democrats—Bayard of Delaware, Broussard of Louisiana, Bruce of Maryland, Dial of South Carolina, Edwards of New Jersey, Fletcher of Florida, George of Georgia, Heflin of Alabama, King of Utah, Overman of North Carolina, Randell of Louisiana, Reed of Missouri, Simmons of North Carolina, Smith of South Carolina, Stephens of Mississippi, Swanson of Virginia and Trammell of Florida.

We can name other Senators who expressed themselves privately as opposed to such legislation but voted for the resolution because of political expediency.

The resolution as it was passed gives Congress the right to limit and prohibit the labor of all persons under 18 years of age, which means that Congress can, if the resolution passes the States, prohibit the employment of farm labor under 18 years of age or can limit same to eight hours per day.

In their greed for power and patronage the Children's Bureau of the Department of Labor sought that power and we believe that it will result in the defeat of the Constitutional Amendment.

Thirty-six States must ratify the amendment and then Congress will have the right to pass a Federal Child Labor Law.

At the hearing before the House Labor Committee in 1912, a Massachusetts Congressman appeared and urged a constitutional amendment instead of passing a child labor law.

For a few minutes there seemed to be a movement in that direction but then they proceeded to move for the enactment of the first child labor law.

We carried that law to the United States Supreme Court and it was nullified.

Then they passed another child labor law which we also carried to the Supreme Court for a knockout decision.

Now after twelve years they have reached the stage advocated by the Massachusetts Congressman.

In the meantime, however, the States have advanced their laws until child labor in factories does not exist except in the created imagination of the people.

Child labor upon the farm does exist but the farmers have too much political strength to permit Congress to regulate same.

Miss Grace Abbott yearns for the power and the million dollar appropriation but it is still a long way off.

Wages Should Not Be Reduced

WE regret exceedingly to learn that a movement for the reduction of cotton mill wages has been started in some sections of the South.

We are earnestly opposed to any reduction in wages that is not based upon a reduction in the cost of living and do not consider depressed market conditions as sufficient justification for reductions.

If wage reductions become general the buyers of goods will expect equivalent reduction in prices of goods and the buyers will get that which is taken from the operatives.

We are fully aware that there is a very small demand for goods and that practically no sales can be made except at a loss but it is better to bear the curtailment strain until the resultant scarcity of goods restores profits than to be unfair to the operatives.

Those who have reduced wages may not like our position but we are absolutely opposed to any reduction of wages at this time.

Extent of Curtailment

THE extent to which the production of cotton goods and yarns by American mills has been curtailed is of vital importance at this time.

A bale of cotton produces upon the average 425 pounds of goods and we therefore are able to determine the extent of curtailment from the bales of cotton consumed.

	1922-23 Bales of Cotton Consumed (000 omitted)	1923-24 Bales of Cotton Consumed (000 omitted)	Decreased Consumption Each Month in Bales	Decrease in Production of Cotton Goods in Pounds
Aug.	527	492	35,000	14,875,000
Sept.	495	483	12,000	5,100,000
Oct.	534	541	*7,000	*2,975,000
Nov.	577	531	46,000	19,550,000
Dec.	528	462	66,000	27,500,000
Jan.	610	577	33,000	14,025,000
Feb.	567	507	60,000	25,500,000
March	623	484	139,000	59,075,000
April	577	480	97,000	41,225,000
May	620	†480	120,000	51,000,000
				255,100,000

*Increase.
†Estimated.

We therefore see that American mills made 255,000,000 less pounds of cotton goods during the past ten months than they did from August 1, 1922, to June 1, 1923.

Reports from every section of the country show that retail sales of dry goods during the past ten months have been equal to those of the same period of the previous year.

If the consumption of cotton goods has remained the same while the mills have reduced their output by 255,000,000 pounds there must be greatly reduced stocks somewhere between the manufacturer and the retailer.

A merchant recently remarked "there is a scarcity of cotton goods in this country but we do not know it."

There is some evidence that he is right.

Idle Spindles Misunderstood

SOME people are so dense that we are obliged to write a second editorial in order to explain a former one.

We recently gave the statistics relative to the number of idle spindles in the several cotton manufacturing States.

The term "idle spindles" could only mean idle spindles and could not possibly include those in part time operation.

The statistics given related only to the spindles entirely idle during the month of April, 1924, and had no relation to part time or curtailment.

As a matter of fact there were more spindles in operation in the South in April, 1924, than in April, 1923, the figures being 16,113,420 as compared to 16,073,276 last year, but the 16,113,420 were to a large extent operating only three or four days per week.

general supervision of the mill operation. Charles T. Main, of Boston, is engineer and architect. The company operating the mills will be known as the Worth Mills. It is capitalized for $1,122,000. It is expected that the building will be completed by October 1 and the mill will be in operation by January, 1925.

The site is located on the Cleburne Road, about four miles southeast of the business center, and is reached by a street car line. The main building will be three stories in height and 318x145 feet in dimensions. It is being so constructed that the original unit can be duplicated, and it is expected that this will be done within the year.

Sale of Model Mill Postponed.

Spartanburg, S. C.—Sale of the Model Mill and other property of the Textile Industrial Institute, which was ordered by the courts for Monday, was deferred until January 1 by E. E. Child, receiver. The sale was postponed on account of action by Methodist leaders in this county who wish to have the property conserved by the Methodists, by whom it was established.

At a meeting of the Methodist lay leaders, a petition was made to Mr. Child asking that the sale be deferred and that he endeavor to make arrangements with the creditors so that more time could be had to work out the affairs of the institution, so that the Methodists might make arrangements to keep the school and it work uninterrupted.

Cotton Spinning in Austria.

The textile industry, with very few exceptions, is suffering greatly from the shortage of money which has become very acute. Dealers are neither able to collect outstanding debts or to sell their stocks; consequently the industry receives few orders, so that stagnation is most pronounced. The ever-fluctuating price of American cotton also tends to prevent sound business operations. Print works are reported busy on specialties with no orders for staple printed fabrics. — Assistant Trade Commissioner E. N. Zwickel, Vienna, May 3.

There was a slight improvement in the Austrian cotton spinning industry during March as compared with February. The production of yarn amounted to 4,330,355 pounds in March as against 4,088,960 pounds in February It is estimated that if the spindles in Austria had operated full time, production would exceed 5,800,000.

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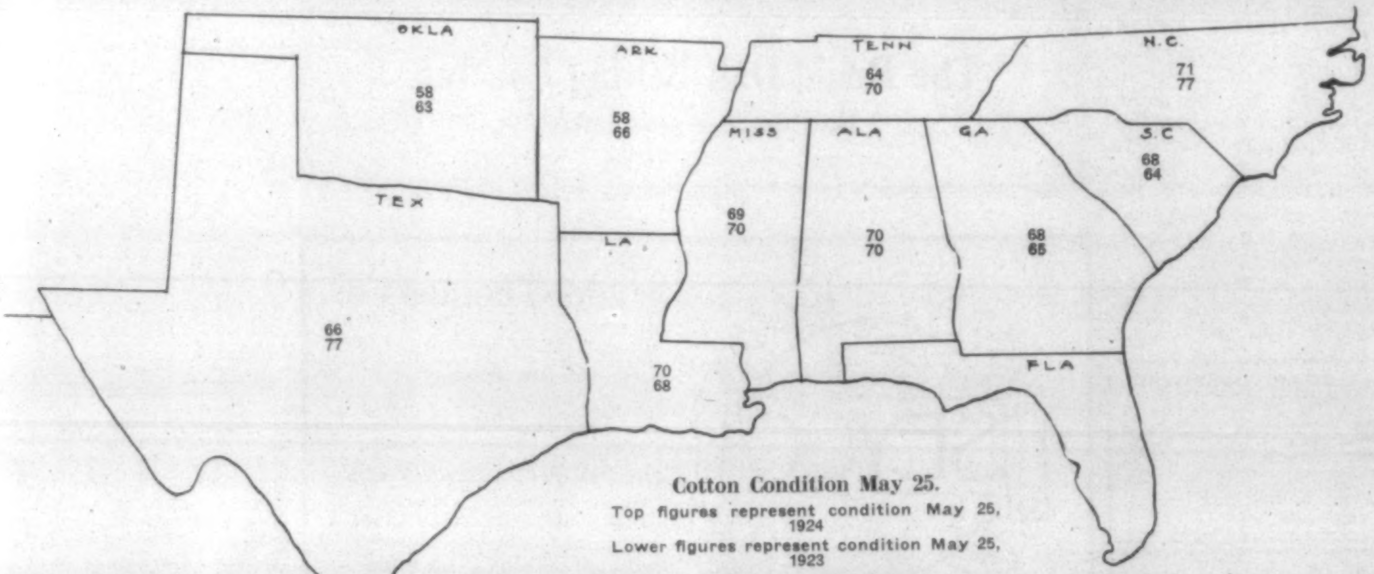

Cotton Condition May 25.

Top figures represent condition May 25, 1924

Lower figures represent condition May 25, 1923

Average May 25, 65.8
Average last year, 71.0

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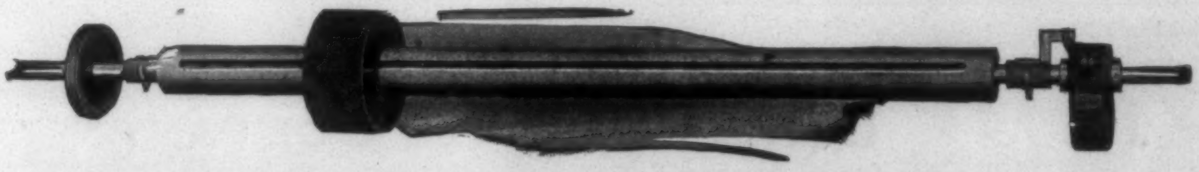

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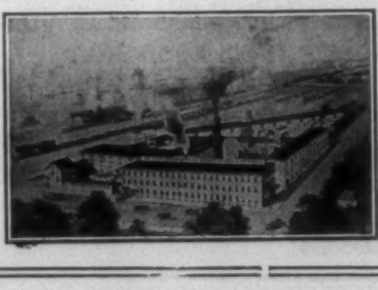

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ery, are necessary to assure the production of a satisfactory cloth. Similarly the utmost care is required in the dyeing and finishing processes, which also contribute their quota to the success or failure of every new cloth put on the market. The British-made cotton cloth specially constructed for umbrella purposes dates back to the early days of the steel frame, and British producers have constantly held the foremost place in the industry by a close study of the technical requirements of the trade, an intelligent application of the knowledge acquired during the course of years, and an intimate acquaintance with the needs of the different markets of the world.—British Trade Review.

Textile Disputes in 1923

By Noel Sargent, Secretary, Industrial Relations Committee, National Association of Manufacturers.

In the first nine months of 1923 the number of disputes among "textile workers" was 122.

The average duration of 91 of these was 14 days.

Thirty thousand six hundred and twenty-six employees were reported as involved in 110 disputes. At an average of 14 days each there was a loss of 428,764 working days.

Probably the 31 disputes whose length was not reported were only a few days each in length, thus making our assumption of 14 days per worker lost and the resultant of 428,764 working days too high. But we may offset this with the fact that we have not included the number of employees involved in 12 disputes.

Our analysis of the complete figures for strikes and lockouts in 1922 showed that the use of the weighted wage figures of the National Industrial Conference Board gives us substantially the same average wage loss as the more complicated analysis according to sex of workers involved, etc. (the differential was only 7/10 of one per cent).

We shall consider the "textile" industry to include the following: Cotton manufacturing, wool manufacturing, silk manufacturing, hosiery and knit goods manufacturing.

Wages.

The average daily wage figures are as follows. We use the National Industrial Conference Board figures for nine months of the year. The daily wage is calculated on the basis that the "weekly earnings" figure of the Conference Board represents 5½ days.

(a) Cotton Manufacturing. The average daily wage of 27,166 workers in the North was $3.83. The average daily wage of 10,327 workers in the South was $3.23. (It should be noted that Southern mills frequently furnish facilities such as housing to their operatives at very nominal charges.) The average daily wage of the 37,493 operatives was, therefore, $3.66.

(b) Wool Manufacturing. The average daily wage of 36,133 workers was $4.31.

(c) Silk Manufacturing. The average daily wage of 17,179 workers was $4.18.

(d) Hosiery and Knit Goods Manufacturing. The average daily wage of 14,379 workers was $3.20.

(e) Textile Trades Combined. The average daily wage of 105,184 workers was $3.91.

Loss to Workers.

The total wage loss of the workers involved in disputes during the nine months was, therefore, $1,676,467. Estimating that the average wages and days lost for the other three months of 1923 were at the same ratio given us a yearly figure of $2,235,289.

Loss to Employers.

In my opinion the best indicator of loss to employers is the amount of profits lost as a result of disputes.

Based on the 1919 figures 16.9 per cent of the gross value of manufactured products in the chief American industries was distributed as wages and 4.65 per cent as "savings" and "profits." In other words, the last two items ("savings" including surplus and extensions) amounted to 27.5 per cent of the former. On this basis the loss to employers in 1923 as a result of textile disturbances was $614,704.

Loss to the Public.

How much has the public lost as a result of industrial disputes? How much are prices increased?

Disputes do not produce goods as a general proposition. What would have been the selling value to the public of goods that would have been produced had there been no strikes? Strikes either deprive us of goods or make us pay higher prices as a result of shortage.

Wages are 16.9 per cent of the selling value of manufactured articles. That is, selling prices are 592 per cent of wages.

The public loss as a result of industrial disputes in the textile industry in 1923 was $13,232,911.

Strikes vs. Lockouts.

The Monthly Labor Review for June, 1923, states that "no distinction is drawn for statistical purposes between a strike and a lockout," since in many cases it was difficult to find a "sound basis for a separate classification of such industrial disputes."

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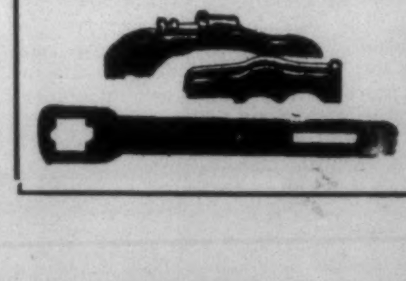
DIXON LUBRICATING SADDLE CO.
BRISTOL, RHODE ISLAND



¶ Use Dixon Patent Stirrup Adjusting Saddles, the latest invention in Saddles for Top Rolls of Spinning Machines. Manufacturers of all kinds of Saddles, Stirrups and Levers.

WRITE FOR SAMPLES

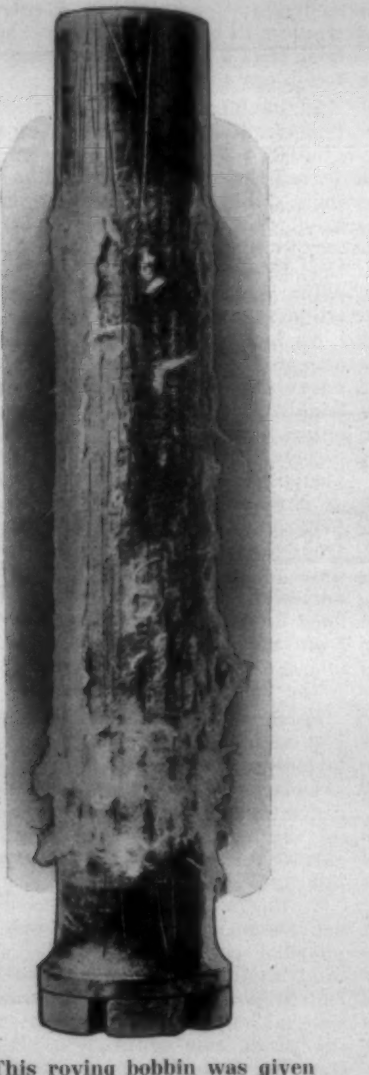
Reclaiming Bobbins By Textilac Treatment

(Continued from Page 12)

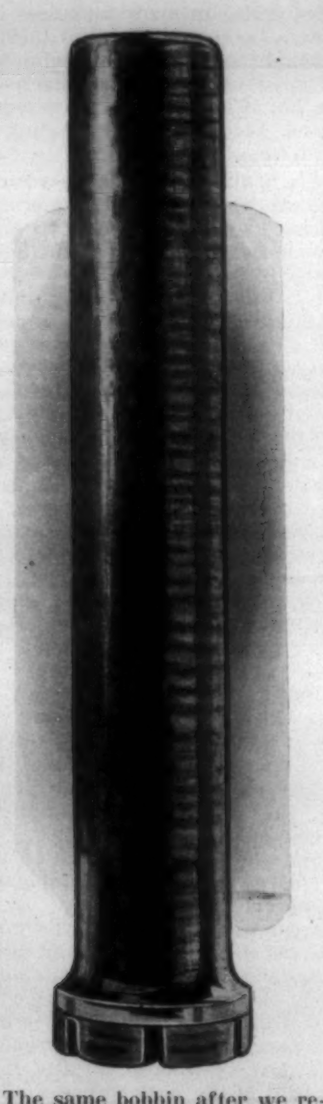
spools, thus eliminating the roughing up of the surface and the tendency to splinter. Naturally Textilac adds materially to the life of the spool.

In treating paper tubes, we lock the tube in its original shape, and Textilac makes it proof against water, oil and steam. Tubes have proven satisfactory when used in place of wood bobbins where filling wind is employed.

Irregularity of finish has been a large obstacle in the path of many bobbin treatments. Lack of proper factory equipment caused different lots of treated bobbins to vary. Our factory is equipped with special electrical and mechanical appliances giving us a capacity of many millions of finished bobbins and eliminating irregularity of finish.



This roving bobbin was given a shellac treatment. The heat created by the rapidly revolving spindle caused the surface to become sticky. Naturally the roving adhered to it.



The same bobbin after we removed the shellac and paint, and processed it. It is steam, oil and waterproof. Roving was steamed on it six hours without any ill effect to either yarn or bobbin.

Normal shipment can be made three weeks from receipt of goods.

New bobbins, when Textilac-treated, possess a better surfacing that instantly raises the efficiency of every department. The regular service makes no impression upon Textilac which is proof against water, oils and steam.

Although a number of bobbin manufacturers combatted the development of our treatment, because they recognized it as an enemy to bobbin-replacement orders, now they are commencing to appreciate the value of this treatment on new bobbins. They rely upon increased volume of business.

The bobbin shown in this illustration has been Textilac-treated and is steamproof, oilproof and waterproof. It will not crack, splinter nor require re-reaming.

This roving bobbin was given a shellac treatment. The heat created by the rapidly revolving spindle caused the surface to become sticky. Naturally the roving adhered to it.

This bobbin was taken from a lot that had been enameled. It had been steamed only once, yet the surface softened, became sticky and produced enough tension to break the yarn before it left the bobbin.

The same bobbin after we removed the shellac and paint, and processed it. It is steam, oil and waterproof. Roving was steamed on it six hours without any ill effect to either yarn or bobbin.

Page Super Heavy Zinc Coat

China Grove Cotton Mills, China Grove, N. C.

Protected by a Page-Armco Fence

Applied after Weaving

Here's positive protection for your property at less cost per year than ever before.

The Page Galvanized-after-weaving process covers Page Fabric with a uniform protective coat of zinc **five** times heavier than ordinary fencing—the last word in economical property protection.

Fence this year. Ask for plans and estimates on Page Protection Fence. We are equipped to give prompt, efficient service in erection.

PAGE STEEL AND WIRE QUALITY PRODUCTS

GENERAL EQUIPMENT COMPANY

Charlotte, N. C.

A Dangerous Competitor—FIRE

Fire insurance adjustments will recoup your losses, but cannot help you fulfill contracts or replace profits that you didn't make.

Over 70% of the cotton spindles of the United States and Canada are insured in the New England Factory Mutual Insurance Companies. To be able to say that your factory complies with the standards set by these companies, goes a long way in convincing your customers and your bank that you will be able to fulfill your contracts as to delivery dates.

For the purpose of furnishing better service to our present and prospective members, we have located a representative in the South. Write him today for full information.

Firemen's Mutual Insurance Company

G. H. STEUART, Southern Representative

2123 Greenway Street

Charlotte, N. C.

ARE YOUR FLOORS SAFE?

No matter how new or how well laid your floors, unless they are in the sanitarily clean condition which results from the use of

WYANDOTTE DETERGENT

they are not as safe as they should be if your busy workers are to be protected from accidents.

which results from sure footedness and a sense of foot from slipperiness. It gives your workers that confidence which results from sure footedness and a sence of foot security.

Moreover the trial of this cleaner will prove that the cost is negligible.

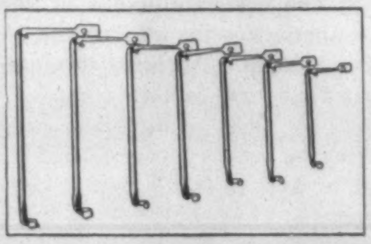
Ask your supply man

The J. B. Ford Co., Sole Mnfrs., Wyandotte, Mich.

"Superior"

Long Service Flyer Presser

Are you using them? If you are not you have a surprise coming to you when you learn how they "Cut the cost" of operating and upkeep.



They are made of the very best of Norway Iron—properly fitted and adjusted before leaving our plant. Made to give the maximum service at the minimum cost and upkeep.

"Quality features Built-in not talked-in."

Catalog on request

Southern Spindle & Flyer Co., Inc,
Charlotte, N. C.

We Manufacture, Overhaul and Repair Cotton Mill Machinery

W. H. MONTY
Pres. and Treas.

W. H. HUTCHINS,
V.-Pres. and Sec.

Need of Research in Textiles

WHAT it the coton industry doing in scientific research? What provision are great mills, growers' associations and merchants' making for the sustained investigation of of basic facts?

Research does not mean experimental technology, though often confused with this very important phase of production. These are today making few organizations who are making very creditable progress in technological modifications, based largely upon accepted but uninvestigated data. In many instances this borders upon research, and there is a twilight zone between technology and research difficult to clearly define, but it is not scientific research in the accepted understanding of this term.

Only in the analytical, disinterested and experimental consideration of basic facts, in the effort to bring these more in harmony with fundamental technology does research lie. And in this day of scientific understanding, no industry can hope to hold its place without adequate research. There is a delicate balance between the different great fundamental industries in an industrial age, that can only be distrubed at the expense of the entire social and economic fabric. If one industry lacks the inspiration and constructive progressiveness because of lack of research it will disarrange other industries.

The other day our great dailies were filled with photographs transmitted by wire from Cleveland. An actual photograph was taken in Cleveland, translated in terms of electrical energy to a receiving station in New York, and ready for the photo-engraver in 45 minutes. The photographs were amazingly accurate, the demonstration completed convincing.

News photograph distribution is a very large and a very important commercial venture today. Many concerns are engaged in this business, and it is a profitable and interesting field. A control of this business is, therefore, an attractive commercial prize. It is conceivable that the owners of our wire communications may reap large profits from this field in the near future.

Profits Measured by Sevice.

It is obvious that these profits will in no small degree be the measure of this new public sevice. Pictorial news, the visualization of events, may become almost as rapld as the transmission of the printed word.

The world heard of tele-photography years ago as a vague possibility, recently as a laboratory achievement and the latest phase was the convincing demonstration of these practical possibilities.

All of this research. The next move will be the coordination of all discovered facts leading surely and sanely to the commercialization of the patient geniuses of research experts in the employ of the telephone company. In the meantime these men, will be pushing on into untrodden wilderness of science, some yet unborn mircale.
working calmly, unhurriedly on

There is a complete severance between the function of research and applied technology. The connecting links between these two departments are the company's executives. Suppose the lords of the copper wires the masters of the tireless dynamos had stopped just where Franklin, Gray, Bell and Morse left them?

Suppose Edison and Steinmetz and others had let "well enough" alone? Where would we look today for the miracles of the fluid we still do not understand completely? Electricity would still be a dubious experiment, trick than a social and economic factor in our lives.

In chemistry, in steel, in motor transporation, we have the same picture. The common interest is served through research. The ultimate policy of the great producing agencies is determined in the laboratory by scientists in advance of practice. Every operation, every modification and incident of production is studied by scientific minds.

No fact, no process, no method is accepted as final. These industries never allow themselves to get on a trial and error basis. Every machine, every unit of organization is merely a transitory form to be replaced by something better, as soon as it may be discovered and tested. From the waste dump of industry, from the dreams of men, Golcondas have been created through trained curiosity. Great universities have been founded and richly endowed to train men to become the sensitive nerves of industrial progress. This is the very soul of progress.

In the textile fields the nearest approach (and a very creditable enterprise indeed) is the laundrymen's association. Today this modest organization comes close to dominating the textile situation. They have earned the privilege. Knowledge is light and light is power.

No modern industry involves more delicate process, is more complex in physical essentials than the spinning, weaving and finishing of fabric. In point of actual and potential size, no industry may compare with the production of textiles. It was the first industry to employ machines, the first to introduce serial production and the division of labor. It led civilization into the modern industrial era. These are great honors.

A devoted group of inspired inventors created this wealth for all time through their genius. They were exploited, robbed, looted of the fruits of their labor in most instances. The commercial geography of the world was changed through their invention. The economic life of this planet underwent miraculous transformation due to the application of the ideas they dreamed alone.

Their example of what research, even unassisted research, can do is before the eyes of all men who may see, and yet, 150 years after the birth of this industry, its fundamental processes are unchanged. Technology has advanced and ampiified, productive powers multiplied beyond belief, yet in principle, in basic understanding few changes have taken place. Arkwright or Crompton would understand a modern mill after a half hour's inspection; understand it, and improve it.

Research in the textile industries must begin with the fiber. Are we growing cotton and wool by the best methods? Are the different regions of production making exhaustive, scientific tests to prove that the best practice is in force today?

The waste through improper, uncertain, highly varying qualities in raw material is immense, beyond belief. The great problem of the Southern cotton grower can not be solved merely by higher prices for raw cotton, for higher prices in raw cotton mean higher prices in fabric and are generally reflected in comparative economic conditions.

When cotton is high, other necessities of life are high, and the condition of the farmer is little if any improved, whatever benefit may accrue to the mere trader and gambler. Wise men are strongly of the opinion that the time is not far distant when the Southern farmer, enlightened and instructed in other phases of agriculture, will prefer to feed the world with foodstuffs rather than the hungry spindles with cotton, the fruit of his misery and the enforced self-denial of his family.

A research laboratory that connected the efforts of the agricultural expert and co-ordinated them with the mills, might save the situation.

There is a myth that we can not grow flax in this country. It is true that we can not grow flax by the same methods employed since flax was first pulled from the earth in the Neolithic Swiss Lake villages. This does not mean that we can not grow flax and harvest it by modern methods, and make it a part of our textile equipment. Research might solve this problem in a few years, and add incalculable wealth and fabric satisfaction to this people.

We grow the worst and the best wools in the world in America. Scientific research might discover for us what is the ideal type of wool for spinning certain types of fabric, what breeding conditions are desirable, what types of food are essential. This means research.

Beyond the fiber lie the great questions of yarn and fabric. What is the ideal twist for yarn for specific purposes? What counts and weights answer most fully the needs of the body or the myriad industrial uses for fabric and yarn?

The immense wealth squandered through stupidity by the automobile tire makers and the spinners of long staple cotton could easily have been obviated if science had preceded technology.

If their conclusions had been correct in the first instance, then every subsequent act of the tire makers, including their vast and unprofitable cotton farms in the Southwest, were perfectly correct. The mistake was made in the assumption of facts and not the proof of facts. Research might have been financed for a century by saving this waste.

We need a research laboratory, independent of any single industry, independent of any group in industry, headed by a man of independence and position in the scientific world, equipped with adequate laboratories and funds to conduct field work, and in the name of common sense, let the men who work under his direction be adequately recompensed for their labors, made secure in their position, unaffected by political changes in the industry or outside of it.

Build a scientific soul for the textile industry, and raise this industry to the dignity of a profession, and put it on a basis of equality with the other great industries in America that have built our wealth and are our strength in peace or in war.

Neither commercial shrewdness nor technological skill is enough. There must be a vision broad enough in an industry to comprehend the value of knowledge that is assured by all.

And the time must come when the guiding technical genius in mills will be recompensed by the engineering fraternity as intellectual and scientific equals.

Our habit of building an institution, housing it in a beautiful building giving it a high sounding name and then paying the responsible brains in that institution wages that are inadequate for a high grade of clerkship, is one of the most wasteful and stupidity criminal habits that we possess.

If we are going to have research in this industry, if we are going to have adequate research and connect it with inspired technology, let it be the best; an imitation of no other undertaking, but a sincere and earnest effort to build an institution that will be the fruitful parent of a greater textile industry of tomorrow.—M. D. C. Crawford in Daily News Record.

German Cotton Mills.

Cotton spinning mills are assured of full operation for several months ahead. New orders are again being received as cotton prices show an upward tendency. It is noticeable that yarns are being imported in increasing quantities from England France, and Belgium. Cotton weaving mills, however, are not so well situated and report a large number of looms idle. Although sales of lighter staple articles are satisfactory, there is little demand for heavy colored materials which form the chief product of the Rhineland district. — Consul Christian T. Steger, Dresden, April 26.

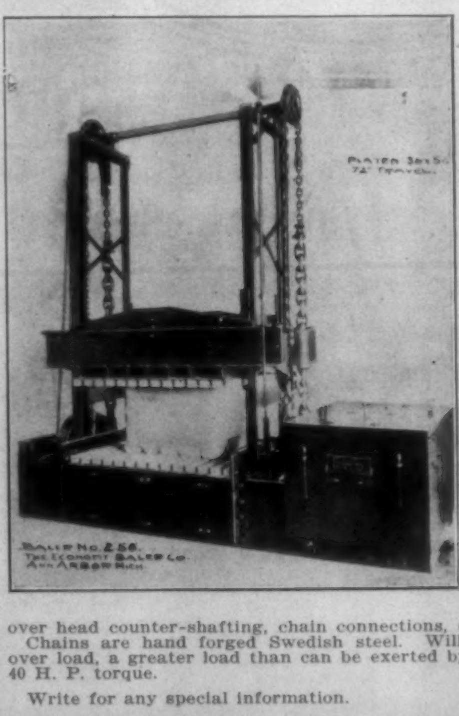
Our Imports Into China.

Imports of cotton piece goods into Hongkong during 1923 amounted to $29,729,200 gold. Of this amount, Great Britain furnished $16,072,528; China, $7,006,351; Japan, $4,961,646, and the United States only $66,150.—Consul Leroy Weber, Hongkong, April 12.

BOBBINS-SPOOLS
SKEWERS-TUBES-ROLLS
Manufacturers and Enamelers

WALTER L. PARKER CO.
LOWELL, MASS.
For Service and Prompt Attention Write Us

ALL STEEL ECONOMY FIRE PROOF CLOTH PRESS
HEAVY DUTY NO. 258. PLATEN 50 x 36



This Economy Heavy Duty Cloth Press No. 258, has a platen 50 x 36 inches. Platen travel of 72 inches. Equipped complete with Direct Connected Electric Motor.

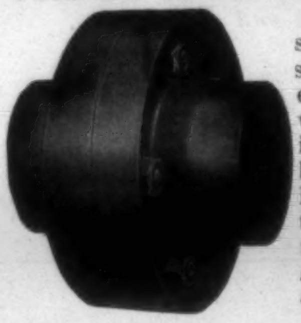
Press will develop tremendous pressure, ample for the baling for Export and Domestic shipment of Duck, Khaki, Osnaburgs, Sheeting, Print Cloths, Ticking, Twills, Denims, Drills, Lawns and Shirtings or for compressing ginghams. Requires only about one minute of actual motor operation to make a Bale of Cloth.

Press maintains its maximum pressure indefinitely, until released. Unlimited compressing platen stroke. In other words, platen will travel as low as is necessary to completely compress the bale, regardless of the third dimension, as the platen can go down to within four inches of compressing platform. Entirely self contained, requiring no cement foundation, pit, over head counter-shafting, chain connections, etc.

Chains are hand forged Swedish steel. Will stand over 50 per cent over load, a greater load than can be exerted by the motor pulling up to 40 H. P. torque.

Write for any special information.

ECONOMY BALER COMPANY
Dept. S. T. Ann Arbor, Mich.



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The T.B. WOOD SONS CO. Line

CLUTCHES

COUPLINGS

FLANGE OR PLATE COUPLINGS

Designed to withstand severe line-shaft service. Flanged to protect the workman from being caught on the bolt heads or nuts. Machined all over to template, making them interchangeable and therefore easily duplicated.

Interchangeability is a feature that has made

THE T.B. WOOD SONS CO. LINE

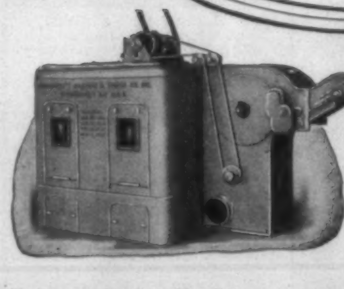
of Power Transmissionary Machinery the standard in so many of the country's largest plants.

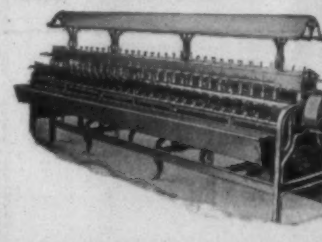
Catalogue on request

T. B. Wood's Sons Co.
CHAMBERSBURG, PA.

MILTON G. SMITH, Sou Sales Agent,
Greenville, S. C.

POWER TRANSMITTING MACHINERY





Complete Equipment
Cotton Machinery
Built by Specialists

Woonsocket Machine & Press Co., Inc.
Woonsocket, Rhode Island, U. S. A.
Picker and Card Room Machinery

Feeders
Vertical Openers
Breaker Pickers
Conveyers
Bale Breakers
Finisher Pickers
Thread Extractors
Roving Waste Openers
Revolving Top Flat Cards
Drawing Frames, Slubbers
Intermediate, Roving and Jack Frames

Fales & Jenks Machine Company
Pawtucket, Rhode Island, U. S. A.
Ring Spinning and Twisting Machinery

Ring Spinning Frames for Cotton, Ring Twisters for Cotton, Wool, Worsted, Silk, Jute, Flax and Novelty Yarn.

Easton & Burnham Machine Company
Pawtucket, Rhode Island, U. S. A.
Warping and Winding Machinery

Spoolers
Beam Warpers
Ball Warpers
Skein Winders
Reels
Doublers
Banding Machines
Card Grinders
Spindles for Cotton and Silk

J. H. Windle, Northern and Export Agent — Pawtucket, R. I.
J. H. Mayes, Southern Agent — Charlotte, N. C.

Number Ten

(Continued from Page 18)

to run and have all frames built for those specific numbers. Would want cards, drawing and slubbers in a department to themselves on account of the humidity and would want intermediates and fine frames in a department to themselves. The same humidity on cards is not sufficient for fine frames and intermedidates.

I would equip the card room with portable scales to weigh waste made at each process. By this method I would be able to keep up with any leak in waste that might be in the plant. The word waste covers a multitude dollars and cents at the end of the year.

Would arrange filling frames in a department to themselves and warp frames to themselves, as it does not take the same humidity with filling as warp. I would run all warp frames with filling wind and would have broad gauge with tape drive. From experience we have found we can get higher percentage production with less waste from tape drive than with band and with filling wind. It preserves the elasticity of the yarn.

Where ordinary warpers are used they should be in connection with spooler room.

The slasher should be in a room alone, as no machines in the whole manufacturing process work under same condition as the slashers and should be treated as an individual unit to get the proper results. No draft ought ever to be allowed upon slasher cylinder while running, would have wood hood. From experience I find they are far superior to metal. Also would use cork insert friction on beam drive with positive drive upon cylinders.

Would use circulating size system with heat and control and register. Too often we turn steam on size kettle call. It boiling when it is only disturbing the sizze mixture; with thermetrograph we can tell just what we have boiled our size.

I would have my drawing in room between slasher room and weave room with double acting door so that no draft would be coming from either. In drawing room would have a man to do nothing but look after the care harness and reeds and if he could not save his salary I would look up one that could.

The weave room should be built so as to have advantage of all light possible. Either have saw tooth roof or skylight. Each loom should have individual motor with safety appliance to knock off or cut out current when loom slams same as starting box on other motors.

Weave room should be equipped with looms for diversified weaves to take care of market conditions as they arise. The day of just plain loom weaving for money-making has passed. Novelties, specialties and small orders we must be equipped to take care of. I would have installed in weave room, vacuum cleaning system and also carrier for all cloth as it comes from loom to convey it to packing room without handling it but the one time from loom until it reached finishing or packing department. Each loom should be equipped with pick counter which I think of all systems is the most reliable one. Each department should be equipped with time clock.

In cloth room or packing department would want it built with perfect lighting system with no possible chance of dropping foreign matter from overhead. Each machine motor driven without any shaft except inside machine. Handling of the finished cloth has a great deal to do with reputation of mill. Too often good cloth has been given a bad name on dirty ends that were made in filthy cloth packing department. Seconds have often been classed as first and firsts as seconds on account of bad light or poor judgment.

Would equip plant to finish all goods when practical, for if the finisher can make money, why cannot the manufacturer prepare and get what belongs to him there? After the plant was thoroughly equipped would want everything that could possibly be done for health of operative by means of modern ventilation.

All trucks should be ball bearing to run as light as possible, using the number absolutely necessary with reserve in stock.

When all was completed would install waste plant to take care of waste from the mill.

W. A. R.

Number Eleven

Mills that were built ten years ago cannot compete with mills that are being equipped today. To improve our equipment, in my opinion, we should begin at the opening room. We should first install a bale opener of the modern type, then investigate the condition of the picker machines. Beater blades should be put in good condition. Grid bars should be adjusted to take out the proper amount of motes.

From my experience, the speed of the three-blade beater should not exceed 850 R.P.M., or 900 at the most. I would prefer putting the stock through a one-blade beater on carding beater after it leaves breaker lapper. Finisher lapper should not produce more than 2,400 pounds of production in ten hours.

The cards should then be inspected. The licker-ins should be put in proper condition, rewound if necessary. It should be seen that all card clothing is tight on the cylinders. Light carding is better for cleaning the stock and for breaking strength of yarn for the reason that there is not so much cotton in the card and the card can do the work that is required of it.

Drawing is a process that should be carefully watched. Mills that are still operating the old model drawing frames should discard them and install the new model machines. It is also important to install enough drawing frames to reduce speed of 1⅜-inch front roll by from 250 to 275 R.P.M.

Every mill should be so arranged that the machines in one process will supply the next process with stock to keep it going without having to draft the stock too much. I would prefer the following rules for draft as near as possible for 24s to 30s yarns. Drawing first process, 5.25; second process, 5.26; slubber machines, 3.40; intermediate fly frames, 4.25; fine roving frame, 5. I mention these because we know many mills with old equipment do not have enough card room machinery to keep the spinning spindles going at capacity if they draft the stock as it should be drafted. However, it would pay any mill to increase the capacity of the card room machinery in order to get the draft right without decreasing the production on the spinning. It might be contended that it would increase the cost of production to add more machinery, but I think it would improve the running of the work in every process in the mill so that the operative could run so much more work that the number of operatives could be reduced, thereby reducing the cost of production and at the same time production would be increased and quality improved.

It would pay any mill that is not equipped with a humidifying system or operates one that is old and inefficient, to investigate and install the best type of modern humidifying equipment to suit the purpose. The increase in the quality and quantity of the output will pay for the installation of such a system. Humidification not only makes smoother and better yarn, but it eliminates slipping of belts and gives the machines the advantage of a greater percentage of speed that is required of the belt.

It would also pay any mill that is not equipped with a good lighting system to equip the plant with a proper system. Good light is essential to good work.

In considering the cost of these improvements we would also consider the cost of operation of the mill. Any mill man should know that anything that will promote the quantity and quality of his production without adding dollar and cents to the pay roll will increase the cost per pound of production.

A. J. K.

Advantages of Light Carding

(Continued from Page 14)

moved by the Duplex can be regulated by the setting of the rolls to the licker-in and by the surface speed of the rolls. The settings and speeds depend entirely upon the class of cotton being used and the quality of work desired.

The fact that the motes, leaf and foreign substances are removed from the cotton before it reaches the cylinder and flat clothing naturally increases the life of the card clothing, as it is not subjected to as rough usage as if these foreign substances were allowed to pass on to the cylinder and flats. The clothing is at all times in much better condition to give satisfactory carding, and requires less stripping and grinding. The cylinder, doffer and flat strips taken from a card which has this duplex device applied can be put back into the regular mixing, as they contain less short fibre and foreign matter. Flat, cylinder and doffer strips can be carded without the need of frequent stripping, and a remarkably good quality of work obtained from same. The quality of the carding is very much improved and produces a very much better quality of yarn.

To enable a greater variation in the speed of the Duplex rolls we are now equipping these devices with the compound drive. This enables the mill to take out as great or as small a percentage of waste as they may desire.

Cotton Condition 65.6 Per Cent

Washington, June 2.—This year's cotton crop began the season with the lowest condition with the exception of 1920, since the keeping of such records was begun 53 years ago.

In its first report of the season, issued today, the Department of Agriculture placed the condition on May 25 as 65.6 per cent of a normal. In 1920 it was 62.4 per cent of a normal on the same date. The condition this year is 7.2 per cent below the average condition on that date in the last ten years, as statistics of acreage are not collected until June 25. The estimate of acreage and forecast of production will be made July 2.

Condition in foreign cotton producing countries is very good, the department announced in a summary of reports from abroad. The acreage in the principal producing countries this year exceeds that of last year by more than 2,000,000 acres, these reports indicate.

Announcement of the acreage planted to cotton this year will be made by the department next month when a forecast of production also will be issued. The area in cultivation at the end of June last year, the department announced. was 38,709,000 acres, as revised by a final check, the area picked last year was 37,130,000 acres, and the yield per acre was 130.6 pounds.

The condition of the cotton crop on May 25 was 65.6 per cent of a normal, compared with 71.0 a year ago, 69.9 in 1922, 66.0 in 1921 and 72.8, the average of the last ten years on May 25, the Department of Agriculture announced in its first report of the season.

The condition of the crop by States follows:

Virginia 63, North Carolina 71, South Carolina 68, Georgia 68, Florida 77, Alabama 70, Mississippi 69, Louisiana 70, Texas 66, Arkansas 58, Tennessee 54, Missouri 52, Oklahoma 58, California 91, Arizona 90, New Mexico 89.

The cotton area in foreign countries this year as compiled by the Department of Agriculture follows:

India 23,088,000 acres, an increase of 1,296,000; Egypt, 1,648,500, a decrease of 220,100; Brazil, 1,965,800, an increase of 453,800; Russian Turkestan, 705,000, an increase of 405,000; Uganda, 4'9,000, an increase of 85,000; Korea, 378,000, an increase of 8,000; Mexico, 279,000, an increase of 37,000; Argentina, 154,800, an increase of 98,300.

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Report of Edgar Watkins, Counsel for Traffic Committee

American Cotton Manufacturers' Association.

Your efficient traffic manager, George W. Forrester, has reported generally as to the activities of your traffic department. Perhaps it may not be out of place for me to supplement this report.

In my report to you a year ago I gave you a general description of the rate system existing in Southern territory and between Southern territory and territories. I then spoke of the then pending investigation known as the Southeastern Glass Rate Case. Recently Mr. Commissioner Joseph B. Eastman in direct charge of that case has presented a tentative plan for the adjustment of the rates of this territory. His plan is a mileage scale of rates. The former rate basis in Southern territory as shown in my address a year ago was one of group points largely and of giving markets rate relationships based not so much on distances as on market competition. Theoretically the plan of Mr. Eastman is just and the propriety of its application to the higher rated traffic is generally recognized. There may be some questions as to the economic soundness of applying the plan to the heavy and low priced commodities. The proposed adjustment recognizes the advantages of the location of all commodities and does not seek artificially to lessen or equalize such advantages.

It is not now proposed to extend the Eastman plan to the commodities you manufacture. These commodities are entitled to commodity rates and neither the carriers nor the commission propose any change in that situation. Retaining as is now understood special commodity rates on your products, the application thereto of a mileage scale would not be generally disadvantageous. On the average such plan with the retention of the commodity rate would probably give a better recognition of the advantages of your respective locations. Final decision by the commission will not be made until late in the year; but whether that plan or the suggestions of the carriers to continue rate groups and rate relationships be adopted, you will not be seriously affected.

It may be not without interest to you to state something of the extent of the investigation which preceded the suggestion of Mr. Eastman. Hearings were had in several Southern cities and in New York, Cincinnati and Washington. The testimony and the exhibits together constitute some 20 thousand pages of record. The briefs, when completed, will themselves make thousands of pages of printed matter. The expense to the carriers and to the shippers and to the Goverment was large; but, if as a result of this a permanent system of rate making is established, the expense will not nearly equal the good that will result. Indeed one of the things most needed by business is stability in rates. You need to know not only what your rates and rate relationships are but what they will be, and the plan of Mr. Eastman will make stability. Southern railways are now generally earning gratifying returns, commodity prices especially on coal are lower than heretofore and it is not unreasonable to expect that there may be reduction in rates. As stated in my report of a year ago you are interested both in the measure and in the relation of rates but more in the later than in the former. At the recent meeting of the National Asssociation of Cotton Manufacturers the discussion evidenced a fear of increased rates. There is, especially in the South, no justification for higher than present rates.

There is a provision of the Merchant Marine Act known as Section 28 which denies to import and export shipments the lower rates and more favorable regulations usually applied thereto, unless the shipments move from and to the United States in vessels documented under the laws of the United States. The effect of this statue, if and when applied, will be harmful to southern ports and would tend to force exports and imports through the North Atlantic ports and especially through the already over taxed port of New York. The section at this time is under suspension with the possibility that Congress will further extend the suspension.

Bulletins are prepared by us and furnished to Mr. Forrester and to your capable secretary, Mr. Adams, for distribution. In these, questions of immediate interest are discussed and advice as to your rights given. During last year, forty-three of such questions were discussed in some 17 bulletins. Your members are entitled to advice on questions of general interest and my firm welcomes the opportunity to assist you in this way. We have during the past year furnished many opinions, principally relating to transportation question to your members.

Blackstone said that every gentle-

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man should study law. By gentleman he meant one who did not work for a living. We define the term as meaning men who honestly earn their livings and such are under an obligation to know something of the law. Indeed, necessity forces business men to learn some law. As gentlemen their duty and as business men their interests require this of them. It is therefore not improper nor unprofitable for you to listen to a statement of the general principles of legislation in this country and of some statutes which daily affect their business.

It is necessary protection and a duty to assert your legal rights. Each by demanding his rights aids in securing the rights of society. Properly to performthis duty requires a study of our system of government and demands the taking of an interest in governmental affairs. It is a matter of paramount necessity today for every citizen to become an active and intelligent partner in the body politic. The government is your partner and you should see that your partner does its duty.

We hear much of law enforcement, and law enforcement is good but not sufficient. The enforcement of the law may be analogized to treating a patient for a disease. is something, however better than mere treating a disease and that is to prevent the disease. What we need is a government prophylactic treatment. It is far better to prevent the disease by creating a respect for law than it is to treat the disease by enforcing the law.

Some distinguish between law and statutes and scientifically there are differences but what scientists call public law and mere ephermal stat-practically may be considered as one.

The present tendency is towards regulating everything possible. It were better if there were fewer statutes. Buckle was correct when he said:

"The most valuable additions to legislation have been enactments destructive of preceding legislation; and the best laws were repealed."

One tribunal spent days and considerable public money in deciding whether or not a particular porcine genealogy was so stated as to constitute an "unfair method of competition." In at least one state it is contrary to law to teach that there are facts supporting the theory of evolution. But I need not take your time to describe freak legislation because that kind does comparatively little harm and is at the worst only annoying.

Some propose to select the parents by eugenic laws, we have maternity statutes and estate taxes; so we have both pre-natal and post-morten regulations.

There is much legislation presented by sincere men and women, untrained in the science of government and of business economics, which substantially handicaps business and does no counter balancing good. This kind of legislation comes in cycles and in one or more periods in the life of every country. The more ignorant the reformer the more energetic and conscientious he can be; for, were he informed, he would know the futility of his proposals and would be restrained in his advocacy thereof. Knowledge makes for conservation.

Cromwell spoke of the English laws as an "Ungodly Jumble."

A careful and accurate observer described the conditions in England in the first half of last century as follows:

"It is no exaggeration to say that the history of the commercial legislation of Europe presents every possible contrivance for hampering the energies of commerce * * * In every quarter and at every moment the hand of government was felt. Duties on importation, and duties on exportations; bounties to raise up a losing trade, and taxes to pull down a remunerative one; this branch of industry forbidden, and that branch of industry encouraged * * * Then, too, we find laws to regulate wages; laws to regulate prices; laws to regulate profits; laws to regulate the interest of money; custom house arrangements of the most vexatious kind. ****

After this doleful description of conditions all of which and more we can duplicate, the writer wisely concludes:

"To maintain order, to prevent the strong from oppressing the weak, and to adopt certain precautions respecting the public health, are the only services which any government can render to the interests of civilization."

The theory that the laws should be so limited was the judgement of the founders of our nation and emphasis was frequently given to the princi-

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ple that too much legislation unduly restrained freedom. Thomas Jefferson said: "Were we directed from Washington when to sow and when to reap, we would lack bread."

We begun in 1870 haltingly to regulate prices and practices and during the fifty years that such course has been pursued we have gone farther perhaps than any other government save only revolutionary France and Soviet Russia.

A leading New Englander a year ago in addressing the National Association of Cotton Manufacturers said that in Massachusetts alone there were seventeen laws regulating and restricting cotton manufacturers. The United States fixes transportation charges, regulates methods of doing business by prohibiting what is termed unfair, prohibits undue restraint of trade, controls the banking industry and exacts numerous taxes, some of which are burdensome and others merely nuisances. There are thirty-three Federal Commissions each exercising regulatory powers over some phase of business and there is little or no important business which is not hampered by some form of regulation. Thousands of laws are annually presented to the Congress and new and unduly restrictive amendments to the Federal Constitution are proposed. States vie with each other in finding new means of taxation, restriction and regulation.

To say a method of doing business must not be "unfair," that a restraint of trade must not be "undue," and that a charge must be "reasonable," leaves the business man in a maze of doubt. When there is doubt and uncertainty there is opportunity for injustice and oppression.

Recent disclosures prove the existing and extensive corruption among officials, national and state. I am persuaded that all honest officials are not dead, but certainly more fraud and bribery have recently been uncovered than at any other period of our history. Two causes contribute to this condition, the more important one being a low ethical standard in politics, such a standard as condemns bribing delegates to Presidental conventions by promises of offices. Such bribery is no less corrupt and is more harmful to the public interests than bribery by money. The other is the large number of indefinite and paternalistic statutes. Office holders are numerous and their powers and duties are not always clearly stated, thus giving them opportunity to claim uncertainty as an excuse for oppression.

But we have regulation with us and two problems are presented to business thereby; one, what can be done to lessen the extent thereof, and two, how best to operate therewith.

Business can influence the character and properly limit the extent of legislation. There are labor blocs and agricultural blocs but there is no business bloc. The division of our people into groups, each striving for its own supposed interest, is unfortunate and business should not form a bloc or try to procure preferential legislation. There have been and probably are large aggregations of capital possessing actually or potentially monopolistic powers and these at times seek to procure what they want by bribery or improper influences. These should be dissolved and the directing individuals adequately punished. Business generally is free from this practice.

It arouses suspicion among some for business in association merely to present the particular facts necessary to be known in order properly to legislate concerning in interests. However, when not too strongly urged by large group of voters, legislators are willing to listen to facts and are influenced by legitimate arguments. There is therefore opportunity for the business man of character, by interesting themselves in the election of capable and honest men, to influence for good the politics and practice of our governments, national and state. Likewise, business men who know the principles of political economy, more properly business economics, may be communicating openly, frankly and intelligently, this knowledge to legislators, executives and administrative commission do much to mitigate and something to remedy evils in legislation and in the administration of the law .

But generally it is said that politics is unfair, unjust, demogogic and irremediable, and that is give as an excuse for not participating in business; as your business is so largely affected by law and its administration, your interest as well as your duty demands that this phase of your enterprise should not be neglected. Politics from which results statutes and regulations is but one department of business.

In practically meeting the situation of over-regulation which handicaps business, there is a necessity for organizations such as this.

Rulings on the thousands of tax questions, decisions on the rights of shippers and on the extent to which control by commissions may go, require daily study and investigation by men specially familar with such questions. The lawyer of a generation ago would be helpless in many of the situations where now business must be advised. Law books are valuable but a knowledge of business economics is absolutely essential to the lawyer of to-day. The cost of this expert advice is prohibitive to individuals and can be obtained only through associations of of men of like interests.

Co-operation of fair minded ethical business men in trade associations is therefore necessary, and this and similar associations should be free to function for the general good.

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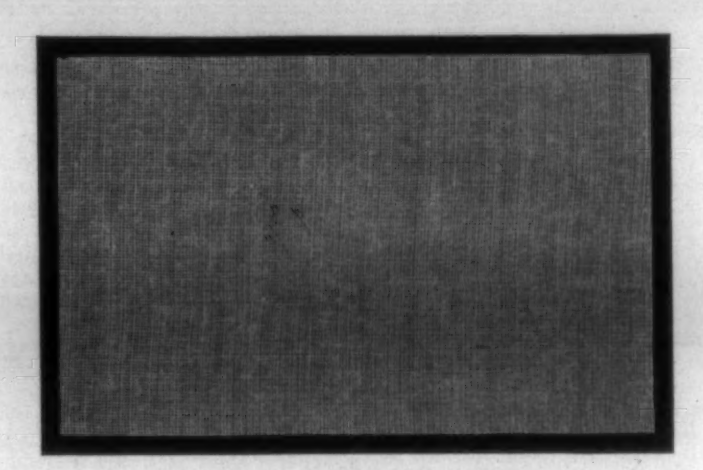
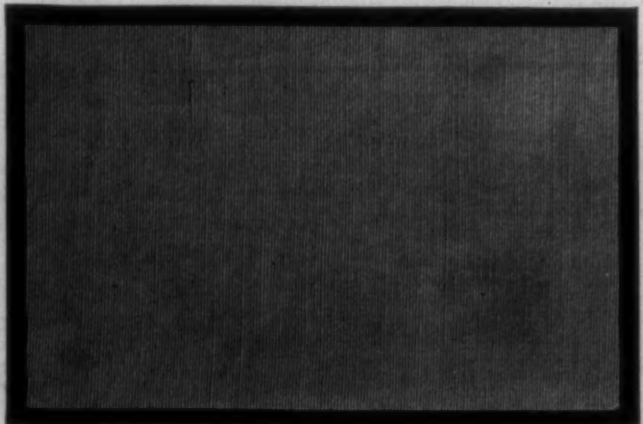


Sample No. 19.—Semi-Voile.

Plain woven. Grey width, 42 inches.
57 ends and 60 picks per square inch, in the grey.
Warp yarn, 47s, hard twisted. Filling yarn, 94/2, hard twisted.
Weight, 7.75 linear yards (9.04 square yards) per pound, in the grey.
Unbleached.

Sample No. 20.—Sateen.

Warp sateen (5-harness). Finished width, 39 inches.
172 ends and 90 picks per square inch, finished.
Warp yarn, 77s. Filling yarn, 89s.
Weight, 6.15 linear yards (6.66 square yards) per pound, finished.
Bleached, mercerized, and schreinered.



Sample No. 21.—Poplin.

Plain woven. Finished width, 54 inches.
183 ends and 58 picks per square inch, finished.
Warp yarn, 87/2. Filling yarn, 67/2.
Weight, 2.48 linear yards (3.72 square yards) per pound, finished.
Bleached, piece-dyed, and mercerized.

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Cotton Goods

New York.—Cotton goods trading was more active in unfinished lines during the past week. The activities of two syndicates interested in purchasing print cloths resulted in the purchase of about 140,000 pieces within the past ten days. Regular users of gray goods bought in moderate quantities for delivery in June and there were some contracts placed for deliveries running into August.

Finished goods were not so active as unfinished lines. Wash goods continued slow, with only small sales. Ginghams, percales and bleached goods sold in moderate volue. Business on almost all classes of wash goods has been held up by the very unfavorable weather. The newest styles in the novelty lines are moving fairly well but only through small orders for quick shipment.

Now that the first half of the fiscal year has been reached by many jobbing houses, it is expected that they will begin to purchase in larger volume. Many of them have bought only in very limited quantities for their fall requirements and there are indications that they may be expected to buy more actively from now on.

Curtailment of production increased somewhat during the week and it is now estimated that the mills of the country are not operating at only about 80 per cent of their capacity, and some authorities regard this estimate as being high.

In the primary markets, inquiry for print cloths and sheetings was fairly active on Friday and Saturday and sales were fairly good. Most of the business placed call for June delivery, but there was some contract business running into August. Prices were firm.

Sales of 38½-inch 64x60s were made for spot delivery at 9⅛ cents early in the day, and for June at 9¼ cents later. July deliveries also brought 9¼ cents, but only a few houses were ready to sell that month at the price. For 68x72s 10¼ cents was paid for later deliveries and 10⅜ cents was paid for later deliveries and 10⅜ cents for spots and nearby. Additional sales of 60x48s at 7¾ cents, spots, were made and sales of many of the odd constructions in small lots.

Sheetings were more active than for some time. Sales of 5-yards at 9 cents, 5.50s at 8 cents, 4-yards at 10½ cents, 2.85s at 14¼ cents and 6.15s at 7¼ cents were reported. In some instances quantities ran up to a half-million yards.

Sateens sold in 10,000-piece lots this week at 11½ cents for 4.70s and 12½ cents for 4.20s, but could not be duplicated at those low figures for other and smaller lots. Fall River sold 4.37s at about 54 cents a pound. Twills were quiet. Some additional business was done in osnaburgs and pajama checks at quoted prices.

The Fall River print cloth market for the week showed improvement over the last few weeks, but on the whole continues far below the average of normal times. The estimated sales for the week are placed at 55,000 pieces, the increase being due to revived interest in sateens. Deliveries will extend through the next two or three months. Moderate inquiry continued for 36-inch low counts, also some of the wider styles.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s	7¼
Print cloths, 28-in., 64x64s	7
Print cloths, 27-in., 64x60s	6¾
Gay groods, 38½-in., 64x64s	9⅝
Gray goods, 39-in., 68x72s	10½
Gray goods, 39-in., 80x80s	13½
Brown sheetings, 3-yard	15
Brown sheetings, 4-yard	12
Brown sheetings, stand.	16
Ticking, 8-ounce	26
Denims	24½
Staple ginghams	15
Kid finished cambrics	9 a10
Dress ginghams	18½a21
Standard prints	9¾

Cotton Brocades From Lombardy.

Cotton goods exported from Lombardy to the United States consist principally of brocades, made from cotton and cotton shoddy. The city of Monza is the center of the industry in Lombardy, and the brocades produced are chiefly for upholstery purposes. The exportation of this kind of goods to the United States in 1923 was more than five times that for 1922.—Consul C. A. Carrigan, Milan, Italy, March 27.

Athens Firm Wants to Supply Oriental Rugs.

A company in Athens, Greece, desires an American market for oriental rugs and carpets of any description.

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BARBER-COLMAN COMPANY
BOSTON, MASS. GREENVILLE, S.C.
MAIN OFFICE AND FACTORY:
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The Yarn Market

Philadelphia, Pa.—There was little change in the yarn market last week, although some signs that are expected to lead to an improved demand were evident. Curtailment has shown an increase and the amount of yarn coming to this market is not large enough to allow any great increase in the size of stocks held by the dealers. Prices held steady in spite of the poor demand. Actual sales continued small, with most buying limited to small orders for spot and nearby shipment. Many users who ordinarily buy in lots of from 10,000 to 15,000 pounds have been purchasing only from 500 to 1,000 pounds at a time.

Carded yarns were somewhat more active than the combed counts. Sales of insulating yarns in moderate volume were reported.

Inquiry for carded knitting and weaving yarns was slightly better but resulted in only a few sales. Prices are generally below replacement costs but there are not as many bargains available as there was a few weeks ago. Yarn from stock is being peddled at prices which spinners will not accept. At the same time, prices for future delivery are quoted two cents under spot and nearby prices, even though there is no profit in the price of the latter.

Yarn prices were quoted in this market as follows:

Two-Ply Chain Warps.

2-ply 8s	42 a__	2-ply 24s	48½a49½
10s	43 a44	2-ply 26s	50½a51
12s to 14s	44 a45	2-ply 30s	52 a__
2-ply 16s	46 a__	2-ply 40s	61 a__
2-ply 20s	46½a47	2-ply 50s	72 a__

Two-Ply Skeins.

8s	42 a__	40s	59 a__
10s to 12s	42½a43½	40s ex.	64 a65
14s	44 a__	50s	72 a__
16s	45 a46	60s	78 a__
20s	46 a__	Tinged Carpet—	
24s	48 a48½	3 and 4-ply	38 a__
26s	49½a50	White Carpet—	
30s	51 a51½	3 and 4-ply	41 a__
36s	57½a58½		

Part Waste Insulating Yarn.

6s, 2-ply	36 a__	12s, 2-ply	40 a41
8s, 2, 3 and 4-ply	36½a__	20s, 2-ply	45½a46
10s, 1-ply and 2-ply	38 a__	26s, 2-ply	49½a50
		30s, 2-ply	51 a51½

Single Chain Warps.

10s	43 a__	24s	48 a__
12s	44 a__	26s	50 a__
14s	44½a__	30s	52 a53
16s	45 a__	40s	61 a__
20s	46 a__		

Single Skeins.

6s to 8s	41½a__	20s	45½a46
10s	42 a__	24s	48 a__
12s	43 a__	26s	49½a__
14s	43½a__	30s	51 a52
16s	44 a__		

Frame Cones.

8s	41 a__	22s	45½a46
10s	41½a__	24s	46½a__
12s	42 a__	26s	47 a__
14s	42½a43	28s	48 a__
16s	43½a44	30s	50 a51
18s	44½a__	30s tying in	48 a49
20s	45 a__	40s	58½a59½

Combed Peeler Skeins, Etc.

2-ply 16s	60 a__	2-ply 50s	78 a__
2-ply 20s	63 a__	2-ply 60s	80 a83
2-ply 30s	66 a__	2-ply 70s	98 a__
2-ply 36s	68 a__	2-ply 80s	1 07a__
2-ply 40s	70 a72		

Combed Peeler Cones.

10s	50 a51	30s	63 a65
12s	51 a52	32s	63 a65
14s	52 a53	34s	65 a67
16s	53 a54	36s	70 a71
18s	54 a55	38s	70½a71½
20s	55 a__	40s	71 a72
22s	55 a56	50s	78 a80
24s	56 a56½	60s	85 a__
26s	56½a57	70s	1 00a__
28s	57 a58	80s	1 10a__

Carded Peeler Thread Twist Skeins.

20s, 2-ply	52 a__	36s, 2-ply	62 a__
22s, 2-ply	53 a__	40s, 2-ply	61 a__
24s, 2-ply	55 a__	45s, 2-ply	71 a__
30s, 2-ply	57 a__	50s, 2-ply	75 a__

Carded Cones.

10s	44 a__	22s	50 a__
12s	45 a__	26s	53 a__
14s	46 a__	28s	54 a__
20s	49 a__	30s	56 a__

Delhi As a Distributing Center for Indian Piece Goods.

Sufficient prominence has not thus far been given to Delhi, India, as an important piece goods center, according to Trade Commissioner James E. Miller, Bombay. Delhi is centrally located, having direct communication both by rail and road to every part of the country in so far as northern India is concerned, and is in an admirable position to adequately meet the requirements of the whole of the United Provinces, central India, certain portions of the Punjab, Rajputana, and the large neighboring native States, the city already serving as a center of distribution for this area through its many bazaars. The business in imported piece goods at the present time practically all goes to Manchester, England, although moderate sales of American grey goods have been made. Samples of materials popular on the Delhi market will be made available upon application to the Textile Division, Bureau of Foreign and Domestic Commerce, Washington, D. C. Refer to File No. 16960.

Production of Artificial Silk Large.

The production of artificial silk yarn in the United States, according to the Silk Association's figures, has increased from 2,445,000 pounds in 1914 to 35,380,500 pounds in 1923. As recently as 1920, production amounted to only 8,000,000 pounds. In addition to the present producing capacity there are several artificial silk mills under construction in the United States at the present time.

Colored Hosiery Popular.

The vogue for new colors in hosiery is causing considerable changes in manufacture. One mill in the Philadelphia district which four years ago was making only four colors is now manufacturing 48 different shades. Some large firms state that as much as 80 per cent of their hosiery business is in colors. This demand for many shades naturally increases manufacturing costs somewhat.

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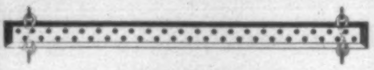

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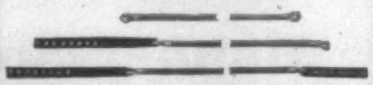

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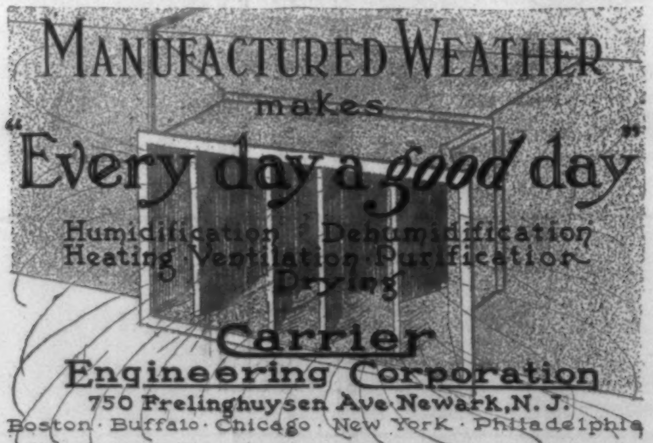

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The fee for joining our employment bureau for three months is $2.00, which will also cover the cost of carrying a small advertisement for one month.

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During the three months' membership we send the applicant notices of all vacancies in the position which he desires.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

WANT position as superintendent or will take place as overseer, carding spinning or weaving, prefer weaving. Now employed in good North Carolina mill, but wish to change for better place. Best of references. No. 4135.

WANT position as overseer carding in good sized room. Prefer Georgia or Alabama. Eighteen years as overseer in good mills. Now overseer in large mill but have good reasons for wishing to change Age 48, have family, have good textile education and can run the job. No. 4136.

OVERSEER carding, now employed, wishes to make change. My experience and training fit me to handle large job in good mill. Good manager of help, first-class references as to character and ability. No. 4137.

WANT position as superintendent yarn mill of 10,000 to 15,000 spindles. Age 46, married, long practical experience, 12 years as superintendent. Now employed but have good reasons for making change. References. No. 4138.

WANT position as slasher tender or second hand in spinning. Well qualified for either place. Best of references. No. 4139.

WANT position as roller coverer. Am expert in roller covering and can demonstrate my ability in short time. Now employed in good mill. Want to correspond with mill needing man of unusual ability. No. 4140.

WANT position as overseer of carding. Long experience in handling a combination of both rooms and can get excellent results. Good references. No. 4148.

WANT position as electrician with good mill or some other manufacturing plant Have had 15 years' experience. Can furnish excellent references. No. 4149.

WANT position as superintendent, or would accept place as carder or spinner. Practical man of long experience as both superintendent and overseer. Best of references. No. 4150.

WANT position as overseer carding or spinning, or master mechanic and electrician. Employed at present but have good reasons for making a change. Can come on ten days' notice. First-class references. No. 4151.

WANT position as overseer carding and spinning. Am 44 years old and have had 20 years' experience as overseer and assistant superintendent. Can furnish best of references. No. 4152.

WANT position as overseer plain weaving or overseer cloth room. Have had more than 25 years' experience on practically all kinds of goods. Am qualified to handle either position. Age 46, have family. Best of references. No. 4153.

WANT position as overseer spinning. Have had long experience in the spinning room and have taken a course with the I. C. S. Good references. No. 4154.

WANT position as overseer of slasher department. Age 32, eight years' experience as slasher and beamer. Good references. No. 4154.

WANT position as overseer weaving. Long experience on wide variety of fabrics and am capable man in every respect. Good references from past and present employers. No. 4156.

WANT position as superintendent of tire yarn or fabric plant, or fine combed yarn mill. Now located in East, but have had 6 years' experience in South. Long term of services superintendent and overseer and am reliable man who can get excellent results. Excellent references. No. 4157.

WANT position as overseer cloth room. Long experience on lawns and sheetings and can guarantee satisfaction. Good references. No. 4158.

WANT position as overseer of small card room or second hand in large room. Am also excellent card grinder. Long experience in good mill. A-1 references. No. 4159.

WANT position as superintendent. Have had 18 years as such and am now employed in my 19th year. Can handle yarn or cloth mill and am high class, practical man. No. 4160.

WANT position as overseer carding or spinning, or both. Past experience and training fits me to handle job in efficient manner. Good references. No. 4161.

WANT position as overseer spinning, or overseer weaving. Long experience in good mills in both departments. Reliable, steady man of good habits. Excellent references. No 4162.

WANT position as master mechanic. Now employed. Experienced in both steam and electric plants and can handle work in satisfactory manner. Good references. No. 4163.

WANT position as overseer spinning. experienced for many years on both carded and fine combed yarns. Would like to correspond with mill needing high-class man. Excellent references. No. 4164.

WANT position as overseer weaving. Experienced on many different fabrics and am competent and reliable. No. 4165.

WANT position as superintendent. Fitted by training and experience to handle large mill in satisfactory manner. Good references. No. 4166.

WANT position as superintendent; yarn mill preferred. Now superintendent of good yarn mill and have held job for over two years. Giving entire satisfaction. Thoroughly understand carding and spinning. 15 years as superintendent and overseer. Good references. No. 4167.

WANT position as superintendent of cloth mill. Long experience and can give references from many mill executives to show excellent record of past service. No. 4168.

WANT position as superintendent of yarn or cloth mill. Now employed as night superintendent but wish day job. References to show ability character and past record. No. 4169.

WANT position as superintendent or will take overseer's place in any department. Thoroughly qualified to handle any room in the mill. Best of references. No. 4170.

WANT position as superintendent or carder and spinner. Will go anywhere. Prefer yarn mill of 5,000 to 30,000 spindles. Can come at once Best of references. No. 4176.

WANT position as carder or spinner. Ten years' experience in carding, spinning and winding. Now employed, but will change on short notice. Age 37, with family. References from present and past employers. No. 4172.

WANT position as superintendent Practical man, good pusher, can get quality production on all classes of yarns. Good references. No. 4173.

WANT position as overseer spinning. Practical man of long experience on practically all yarn counts made in South. Good references. No. 4174.

WANT position as overseer spinning. Have had 20 years' experience in spinning, spooling and warping in some of best mills in South, and West, both white and colored work. Age 36, married, sober now employed as overseer. Good references. No. 4175.

WANT position as superintendent .or would take overseer of carding and spinning. Many years' experience as superintendent and overseer and am well qualified in every respect. Best of references. No. 4171.

SUPERINTENDENT or carder and spinner desires position. Would take place as night superintendent in large mill. Prefer mill on plain work. Satisfactory references. No. 4177

WANT position as superintendent of mill or plain weaving or hosiery yarn. Am now 32 years of age and can give good references. Now employed as superintendent. No. 4178.

WANT position as superintendent or assistant superintendent in medium size mill. Would consider weave room in large mill. Best of references. No. 4179.

WANT position as spinner. Age 48. Have had 20 years' experience and can give excellent references. No. 4180.

WANT position as superintendent of finishing in yarn plant. Long experience in large Eastern mill and have excellent record of service. Fine references. No. 4181.

WANT position as carder or spinner, or box comber. Am specialist in combed yarn work and have had a long term of satisfactory service. Excellent references. No. 4182.

WANT position as shipping clerk. Four years' experience and can handle big job Now employed as shipping clerk. Gilt-edged references. No. 4183.

WANT position as carder and spinner. Now employed as such, but wish a larger place. Experienced, practical and reliable man. No. 4184.

WANT position as overseer finishing department, white or colored goods. Have had 16 years' experience in cloth room, 12 years as overseer on white and colored goods, wet and dry finish. Best of references. No. 4185.

WANT position as overseer spinning, Have had 12 years' experience as overseer and can furnish best of references. No. 4186.

WANT position as overseer weaving. Can handle either plain or fancy work both colored and white Now employed. First-class references. No. 4187.

WANT position as superintendent, carder, spinner or carder and spinner. Have acceptably filled overseer's position for long term of years. Best of references. No. 4188.

WANT position as master mechanic and engineer. Experienced and skilled mechanic of long experience. Best of references. No. 4189.

WANT position as overseer spinning. 12 years as overseer and 5 years as overhauler in spinning and twisting. Good references. Address No. 4190.

WANT position as superintendent, or overseer weaving or designer. Have specialized in fancy weaving and designing and can show samples that have proved business getting. Long record of satisfactory service in fine weaving plants. Good references. No. 4192.

WANT position as superintendent of small yarn mill or carder and spinner in larger mill Have had 20 years as overseer. Good references. No. 4191.

WANT position as superintendent or carder and spinner. Now employed but want better job. First-class references. No. 4193.

WANT position as superintendent. Prefer weaving mill. Practical man of long experience on great variety of fabrics. Good references No. 4194.

WANT position as overseer carding anywhere in South. Long experience and also graduate of I. C. S Good references. No. 4197.

WANT position as overseer spinning, twisting or winding at not less than $40 weekly. Have had 25 years in the mill. 10 years as overseer, have run present room 3 years. Good references. No. 4195.

WANT position as overseer weaving. My experience has been as overseer in a number of large weave rooms and many kinds of goods. Excellent references. No. 4196.

WANT position as overseer of small weave room on plain goods. Am hustler for quality production and good manager of help. Good references. No. 4198.

WANT position as carder or spinner or superintendent. Now employed. Manv years as both superintendent and overseer and am competent worker. Good references. No. 4199.

WANT position as carder. Have had 7 years as overseer and can give first-class references. No 4200.

WANT position as superintendent of yarn or weave mill, or overseer weaving. Long experience in carding, spinning and weaving and winding and can give good references. No. 4201.

WANT position as superintendent of yarn mill. Prefer plant on tire fabrics. Experienced man of good habits and character and can give good references. No. 4202.

WANT position as overseer weaving on any kind of plain work; 12 years as overseer and have always been able to get the goods. Now employed but have good reasons for changing. Good references. No. 4203.

WANT position as spinner. Have held present job for over 6 years and made good record. Can get quality production at right price. Good references No. 4203.

WANT position as carder or carder and spinner. Am hustler for production and quality and know how to keep costs down. No. 4204.

WANT position as superintendent of yarn mill. Have had 12 years' experience. Have finished course in grading and stapling cotton. Know mill business thoroughly. Best of references as to character and ability. No. 4206.

WANT position as carder in small mill or second hand in large mill. At present employed by good mill but desire to change. Good references as to character and ability. No. 4207

WANT position as carder. Thoroughly understand the carding process and have long term of experience in good mill. Best of references. No. 4208.

WANT position as superintendent. Experienced and reliable man who can get results. Experience gained in some of the best mills in the Carolinas. Excellent references. No. 4209.

WANT position as superintendent. Am competent executive and good manager of help, experienced in all departments of mill and man of good character and habits. Best of references. No. 4210.

WANT position as superintendent of medium sized yarn mill or assistant superintendent in large mill Prefer mill in Georgia, Alabama or Missippi. Long experience as overseer spinning. Have held present place as assistant superintendent for many years, making 4s to 40s single and ply cones, tubes, skeins and warps. References. No. 4111.

WANT position as superintendent or overseer carding and spinning. Am 41 years old, have had 20 years' experience as overseer and superintendent of mills in Georgia. Can give good references as to character and ability and can come at once. Good manager of help. No. 4113.

MASTER mechanic and chief engineer of extraordinary ability will consider proposition by March first. Fine machinist and mechanical engineer. Correspondence strictly confidential. No 4114.

WANT position as superintendent of yarn mill, or would accept place as carder and spinner. Practical man of long experience who can get results and who can successfully manage help. References. No. 4423.

WANT position as overseer carding. Qualied by experience and training to handle card room in thoroughly practical and up-to-date manner. Good references. No. 4224.

WANT rposition as superintendent o overseer large weve room. Now employed as superintendent but would like better job. Have long record of successful service and references to show it. No. 4225.

WANT position as overseer weave room or cloth room. Now employed, but wish larger job. Experienced on many lines of goods, competent and reliable. References to show character and ability. No. 4226.

WANT position as assistant superintendent. Age 25, graduate of well-known textile school, three years' experience in all departments of mill, two years as manager of testing laboratory in large mill. Excellent reference. No. 4227.

WANT position as overseer weaving. My experience covers a long term of years in a number of first-class mills, making a wide variety of goods. Excellent references. No. 4228.

WANT position as carder and spinner, either or both. Age 35, have family. Experienced man who can give as reference some of the best mills in the South. No. 4231.

WANT position as overseer of weaving or superintendent of plain weaving mill. Long experience as both superintendent and overseer and can get excellent results. No. 4333.

WANT position as overseer carding. Now employed as night carder, but wish day job. Have had 20 years' experience in carding, spinning, spooling and warping, both white and colored work. Can furnish good references. No. 42[illegible]4

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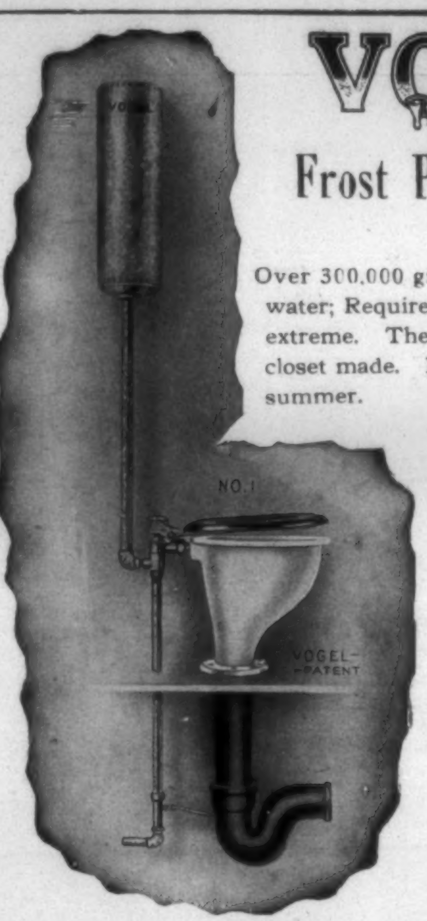

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